

*With the
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HEALTH DEPARTMENT,
GLEBE STREET,
STOKE-ON-TRENT.



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County Borough of Stoke-on-Trent.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH,
1921.

G. PETGRAVE JOHNSON,
M.D., C.M., D.P.H.

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Staff of the Public Health Department.



Medical officer of Health:

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Tuberculosis Officer:

JAMES MAGILL, M.B., B.Ch., B.A.O.R.U.I., M.D., D.P.H.

Assistant Tuberculosis Officer:

ALLAN WOTHERSPOON, M.B., Ch. B.

Surgical Tuberculosis Officer:

WM. MITCHELL SMITH, M.D., M.B., C.M. (PART TIME).

Lady Medical Officer:

JESSIE BALSILLIE, M.B., Ch.B.

Assistant Lady Medical Officer:

GWENDOLINE M. COGSWELL, L.S.A.

Bacteriologist:

EDGAR C. MYOTT, M.D., M.B., B.S., M.R.C.S., L.R.C.P.
(PART TIME).

Public Analyst:

E. W. T. JONES, F.I.C. (PART TIME).

Chief Inspector of Nuisances:

HARRY SPENCER, Cert. R.S.I., Cert. Meat Insp.

Cleansing Superintendent:

TOM STAKE, Cert. R.S.I.

Chief Inspector of Meat, Provisions, &c.

WILLIAM MARTIN, Cert. R.S.I., Cert. Meat Insp.

Housing Inspector:

WILLIAM A. EDGE, Cert. R.S.I.

Deputy Chief Inspector of Nuisances and Smoke Inspector:

JAMES NICKLIN, Cert. R.S.I., Cert. Meat Insp.

*Inspector under the Sale of Food and Drugs Acts and Assistant Meat
and Provisions Inspector:*

SYDNEY GREEN, Cert. R.S.I., Cert. Meat Insp.

Inspector of Canal Boats and Common Lodging Houses and Workshops:
JOHN F. ADDISON, Cert. R.S.I.

Inspector of Dairies, Cowsheds and Milkshops and Factories:
ALBERT E. HULME.

Executive Officer under the Rats Order:
THOMAS BASSETT, M.C.

District Inspectors of Nuisances:

Douglas Hurst, Cert. R.S.I.; William Ellerton, Cert. R.S.I.; William H. T. Wilkins, Cert. R.S.I., Cert. Meat Insp.; Thomas F. Cartledge, Cert. R.S.I., Cert. Meat Insp.; Ernest Booth, Cert. R.S.I.; Sydney Skitt, Cert. R.S.I., Cert. Meat Insp.; John A. T. Kent, Cert. R.S.I.; B. Turner, Cert. R.S.I.; W. W. Baum, Cert. R.S.I.

Senior Health Visitor:
ALICE M. GOUGH.

Health Visitors:

Martha Forster, Florence Tait, Emily Radcliffe, Annie Eccles, Lizzie Mayer, Hannah Woollam, Evelyn Morgan, Gertrude Lawton, E. M. P. Thomas, Ellen Callon, Esther A. Jolley.

Tuberculosis Nurses:
Alice Rice and Kate Gough.

Chief Clerk:
JAMES E. SMITH, Cert. R.S.I.

Clerks:

Norman Walleth, Harold Willdigg, Colin Clegg, Percy Hall, S. Frederick Littler, Victor Leek, May Appleton, Catherine Johnson, Doris Thorneycroft, Edith M. Hayes, T. Gilbert Weston, Cecil Stubbs.

Matron: Stanfield Sanatorium:
LAURA GARTON.

County Borough of Stoke-on-Trent.

PUBLIC HEALTH DEPARTMENT.

*To the Mayor, Aldermen and Councillors of the
County Borough of Stoke-on-Trent.*

LADIES AND GENTLEMEN,

I have the honour to present to you the following report for the year 1921:—

The estimated population at the middle of the year, based on the Census was 245,600.

The Birth Rate was 29.0 compared with 30.9 for 1920. In 1906 the Rate was 35.2; in 1914, 31.6; 1915, 26.9; 1916, 23.9; 1917, 20.8; in 1918, 22.3; and in 1919 22.5.

The Death Rate was 14.8. The Rate for the 96 Large Towns was 12.3 or 2.5 lower than that for the County Borough. The excess of births over deaths was 3,485.

The Infantile Mortality Rate was 134 per 1,000 births, compared to 98 in 1920, and 111 in 1919. In 1920 the rate was the lowest ever recorded. In the 96 Large Towns of England and Wales the Infantile Mortality Rate for 1921 was 87. This year the rate for the County Borough is the highest recorded in any large town in the country. It is due to the excessive number of deaths from Epidemic Diarrhœa which occurred in the third quarter of the year. It will be remembered that the year was remarkable for the long, hot, dry summer and autumn, and though the Infantile Death Rate did not rise to the same height as it did in 1911 it is evident that no efforts in the campaign against Infantile Mortality can yet be relaxed.

The scheme for the abolition of cesspit closets in the Borough is now in full operation and satisfactory progress is being made; in two years time few of these insanitary conveniences should be in existence in the Federated area, though the large number in the recently added areas will still have to be dealt with. A complete scheme has been formulated for the satisfactory disposal of the whole of the ashpit and ashbin refuse in the area. It is desirable that it should be carried out with as little delay as possible.

Special attention has been given to the occurrence of Enteric Fever during the year. Though there were only 27 cases it was a larger number than had been notified for several years. It is a disease which should be entirely eliminated in a few more years.

The provision of a Maternity Hospital for the Borough has been postponed apparently for some years—the need of one is as urgent as it is possible to be.

The Housing problem has attracted the earnest attention of the Health Committee and Council during the year. The number of houses required is still as great as ever, and unhealthy areas call as loudly as ever for drastic treatment. It is not yet possible to close a single house as unfit for habitation, and it is extremely difficult to remedy overcrowding. Of 1,000 houses recently examined, it was found that no less than 307 were occupied by more than two families.

I regret to record the deaths during the year of two of the oldest members of the staff of our Department, viz.: Mr. William Martin and Mr. Arthur Salt. Both these officers were taken over at Federation of the towns and the Corporation has sustained the loss of two valuable servants.

I have again much pleasure in recording my appreciation of the efficient and willing co-operation of the whole staff of the Health Department.

I am, Ladies and Gentlemen,

Your obedient servant,

G. PETGRAVE JOHNSON.

Public Health Department,

Stoke-on-Trent,

May, 1922.

POPULATION.

The Census of 1921 showed that the population of the County Borough was 240,436. The Registrar General in a Circular letter states that as a large number of people were on holiday at the time the Census was taken the figures have been corrected accordingly. He gives the corrected population for Stoke-on-Trent to the middle of 1921 as 245,600, an increase of 5,164 over the Census figure.

The populations at the Census periods and the estimated population at the middle of 1921 were as follows:—

CENSUS	1901	1911	1921	Estimated to middle of 1921
BURSLEM ...	38,766	41,566	42,462	43,374
FENTON	22,738	25,626	26,718	27,292
HANLEY	62,226	66,255	67,876	69,333
LONGTON	35,815	37,479	37,810	38,623
STOKE	30,458	36,218	37,779	38,590
TUNSTALL .	24,709	27,390	27,791	28,388
TOTALS ..	214,712	234,534	240,436	245,600

The estimated population as given by the Registrar General and based on the Census figures of 1921 is 3,252 less than the estimated population of 1920.

The figure 245,600 is used for the calculation of both the death rate and the birth rate.

The increase of population in 1901 over 1891 was 15 per cent., in 1911 over 1901, 9 per cent., and in 1921 over 1911 was 3 per cent., the average increase throughout the country was about 5 per cent.

The distribution of the population over the whole area at the time of the 1901 Census averaged 18.6 persons per acre, during the year 1911, 21.0 persons per acre, and in 1921 22.0 persons per acre.

TABLE 1.

Population Statistics.

Name of Town	Area of Districts	Built up Area	Per-centage of whole area built up	Population 1921 Census	Density of Population Whole Area	Density of Population Built up Area
	ACRES	ACRES	%		PER ACRE	PER ACRE
TUNSTALL ...	1,764	184	10	27,791	15·75	151·03
BURSLEM ...	1,862	445	24	42,462	28·17	95·41
HANLEY ..	1,958	730	40	67,876	34·60	92·98
STOKE ...	1,882	417	22	37,779	20·07	90·59
FENTON ...	1,726	226	13	26,718	15·47	118·42
LONGTON ..	1,947	525	27	37,810	19·42	72·01
TOTALS AND AVERAGES }	11,139	2,528	23	240,436	21·49	95·10

INHABITED HOUSES.

At the time of the Census in 1901 there were in the County Borough 41,028 inhabited houses, and at the Census of 1911 there were 46,906 inhabited houses. The figures for the Census of 1921 are not yet available. The proportion of population to houses was, at the Census of 1901, 5.2 persons per house, and in 1911, 5.0 persons per house. There are practically no empty houses in the Borough.

During the year 1921, 54 new dwelling houses were certified for habitation in the County Borough. 46 of these were built by the Corporation and 8 by private owners. In 1920 the number was none, in 1919 one, in 1918 3, in 1917 3, in 1916 20, in 1915 33, in 1914 90, in 1913 173, in 1912 158, in 1911 190, and in 1910 the number was 322.

RATEABLE VALUE.

The rateable value of the Borough for the purposes of the Poor and Borough Rates in 1921 was—

£914,485 compared to £894,697 in 1920.

The assessable value of the General District Rate—

£890,340 compared to £870,476 in 1920.

Number of Houses assessed at £8 and under as at June, 1921—

Goldenhill	...	...	...	1,073
Tunstall	...	...	...	2,637
Burslem	...	...	...	5,925
Hanley	...	...	...	8,689
Stoke	...	...	...	4,168
Fenton	...	...	...	3,673
Longton	...	...	...	5,045

31,210

Rateable value £203,878.

Average rateable value per house £6 15s. od.

The total rates levied in the Borough for all purposes during the years 1921-22 and 1920-21 were—

	1921-2.	1920-1.
Burslem ...	19/10 in the £	20/6 in the £
Fenton ...	17/7½ „	17/10 „
Hanley ...	21/9½ „	22/3½ „
Longton ...	20/2 „	20/7½ „
Stoke ...	19/11 „	20/3 „
Tunstall ...	18/5 „	18/10½ „
Goldenhill ...	18/6 „	18/11½ „

The sum represented by a penny rate was £3,360.

TABLE 2.—Areas, Population and Persons per Acre in Existing Wards.

Ward No.	Acreages	Population at Census 1921	Population to middle of 1921. (Registrar General's Estimate.)	No. of persons per acre
1	1,090·93	10,104	10,321	9·46
2	249·70	9,835	10,046	40·24
3	417·94	7,852	8,021	19·19
4	439·66	8,018	8,191	18·63
5	433·25	8,303	8,481	19·58
6	214·84	9,567	9,773	45·49
7	294·94	8,394	8,574	29·06
8	480·95	8,180	8,355	17·37
9	226·95	11,659	11,909	52·47
10	255·75	10,276	10,497	41·04
11	500·53	10,546	10,773	21·52
12	203·77	8,770	8,958	44·01
13	315·91	9,043	9,237	29·19
14	266·96	8,129	8,304	31·14
15	202·92	9,453	9,655	47·58
16	611·60	9,885	10,097	16·50
17	280·85	9,311	9,511	33·50
18	200·03	9,872	10,084	50·04
19	417·58	8,155	8,330	19·94
20	565·65	9,014	9,208	16·38
21	763·79	8,711	8,898	11·64
22	747·92	9,549	9,754	13·04
23	738·70	9,245	9,444	12·78
24	405·84	10,573	10,800	26·56
25	305·80	9,211	9,409	30·76
26	506·24	8,781	8,970	17·71
	11,139·00	240,436	245600,	22·04

BIRTHS.

There were 7,132 births registered in the County Borough of Stoke-on-Trent in 1921, giving a birth rate of 29.0 per 1,000.

The rate for the 96 great towns of England and Wales was 23.3 per 1,000, and for England and Wales 22.4.

The rate is 1.9 lower than in 1920. The birth rate in the County Borough, in 1906 was 35.2, 1907—33.5, 1908—34.5, 1909—33.1, 1910—33.5, 1911—31.3, 1912—31.2, 1913—31.9, 1914—31.6, 1915—26.9, 1916—23.9, 1917—20.8, 1918—22.3, 1919—22.5, 1920—30.9 and 1921—29.0.

In 1876 the birth rate in this country attained the highest point on record, viz.:—36.3 per 1,000 living. Since that date the rate has, with few exceptions, fallen year by year.

The ratio of births of males to births of females during the year was 1,081 to 1,000. For the year 1920 the ratio was 1,038 males to 1,000 females; 1919, 1,071 to 1,000; 1918, 1,019 to 1,000; 1917, 1,034 to 1,000; 1916, 1,055 to 1,000; 1915, 1,007 to 1,000; 1914, 1,018 to 1,000; 1913, 1,018 to 1,000, and for the year 1912, 1,067 to 1,000; 1911 it was 1,003 to 1,000. In the years 1865-1917 the ratio in England and Wales has varied from 1,032 per 1,000 to 1,054 per 1,000.

Of the 7,132 children born, 3,706 were males, and 3,426 were females. The number of births and birth rates for the various areas are as follows:—

Burslem	...	1,335	Birth rate	30.7	per 1,000.
Fenton	...	751	„	27.5	„
Hanley	...	2,039	„	29.4	„
Longton	...	1,143	„	29.6	„
Stoke	...	987	„	25.5	„
Tunstall	...	882	„	31.0	„

The birth rate was highest in Tunstall and lowest in Stoke.

The natural increase of population, that is, excess of births over deaths was 3,485. The previous year it was 4,507, a difference of 1,022 lives. This is accounted for by the fact that the number of births registered was 580 less than in 1920, while the number of deaths was 442 more.

ILLEGITIMATE BIRTHS.

Of the total births, 338 or 4.7 per cent. were illegitimate. The rate for 1920 was 4.8. The percentage of illegitimate births in England and Wales is 6.05 for the year 1919. The Illegitimate Birth Rate per 1,000 of population was 1.3 in Stoke-on-Trent as compared with 1.1 in England and Wales for the year 1919.

Of the 338 illegitimate births 175 were males and 163 females.

STILL BIRTHS.

The Superintendents of the Cemeteries report that the number of bodies of still-born children buried during the year was:—

Burslem	...	...	...	...	97
Fenton	...	...	...	...	42
Hanley	...	...	...	...	104
Longton	...	...	...	...	56
Stoke	...	...	...	...	37
Tunstall	...	...	...	...	46
Stoke Workhouse	...	...	...	...	10
					—
					392

Under the Notification of Births Act, which was brought into force in the County Borough under the Federation Act, all still births must be notified to the Medical Officer of Health. 377 were notified during the year under the Act, and of these 242 were attended by midwives, and 135 by medical men.

Taking the number of still births that occurred in 1921 as 392, it is equal to 5.2 per cent. of the total births. In 1920 there were 411 still births, equal to 5.0 per cent.

TABLE 3.

Vital Statistics of Whole District during 1921 and previous years.

Year	Population estimated to middle of each year	BIRTHS			Total Deaths registered in the district		Transferable Deaths		Nett Deaths belonging to the District			
		Un- corrected Number	Nett		Number	Rate	of Non- residents registered in the District	of Resi- dents not registered in the District	Under 1 year of age		At all ages	
			Number	Rate					Number	Rate per 1,000 Nett Births		
1911	235,069	7,374	7,367	31·3	4,637	19·7	112	161	1,495	203	4,686	19·6
1912	237,159	7,403	7,399	31·2	3,747	15·7	135	170	947	128	3,782	15·9
1913	239,284	7,655	7,643	31·9	4,531	18·5	160	190	1,295	169	4,561	18·7
1914	241,430	7,647	7,640	31·6	4,213	17·4	162	189	1,101	144	4,240	17·5
1915	225,405	6,506	6,494	26·9	4,081	18·1	151	224	955	147	4,154	18·4
1916	219,755	5,731	5,728	23·9	3,620	16·4	170	242	725	126	3,692	16·8
1917	215,116	4,992	4,991	20·8	3,473	16·1	149	231	579	116	3,555	16·5
1918	208,365	5,222	5,219	22·3	4,175	20·0	207	259	582	111	4,227	20·3
1919	239,316	5,638	5,635	22·5	3,897	16·2	192	174	628	111	3,879	16·2
1920	248,852	7,716	7,712	30·9	3,192	12·8	150	163	759	98	3,205	12·8
1921	245,600	7,132	7,132	29·0	3,714	15·1	209	142	959	134	3,647	14·8

Area of District in acres (land and inland water) } 11,139

Total population at all ages—240,436 at Census, 1921
Number of inhabited houses—46,906 } At Census, 1911
Average number of persons per house—5·0 } (of Census Vol. V.)

TABLE 4.

Showing the number of Births, Birth Rate, number of Deaths, Death Rate, and Infantile Mortality Rate in each of the 26 Wards.

WARD		No. of Births notified	Birth Rate	No. of Deaths registered	Death Rate	Infantile Mortality Rate
1	...	324	31·3	148	14·3	135
2	..	364	36·2	146	14·5	129
3	...	205	25·5	122	15·2	131
4	...	265	32·3	123	15·0	113
5	...	182	21·4	81	9·5	82
6	...	328	33·5	163	16·7	186
7	...	285	33·2	166	19·3	214
8	...	262	31·3	129	15·4	171
9	...	417	35·0	239	20·0	170
10	...	290	27·6	161	15·3	151
11	...	347	32·2	208	19·3	152
12	...	280	31·2	138	15·4	153
13	...	250	27·0	134	14·5	152
14	...	187	22·5	127	15·2	171
15	..	245	25·3	106	10·9	122
16	..	265	26·2	159	15·7	86
17	...	228	23·9	101	10·6	61
18	...	259	25·6	173	17·1	177
19	...	279	33·4	120	14·4	68
20	...	227	24·6	105	11·4	123
21	...	248	27·8	121	13·5	104
22	..	234	24·0	99	11·1	68
23	...	307	32·5	155	16·4	120
24	...	354	32·7	169	15·5	129
25	...	242	25·7	123	13·0	115
26	...	229	25·5	121	13·4	91
Whole Boro.		7,103	29·0	3,647	14·8	134

TABLE 5.

Showing the Birth Rate, Death Rate, and Infantile Mortality Rate for the past twenty-two years.

	Birth Rate	Death Rate	Infantile Mortality Rate
1900	39·1	25·3	207
1901	35·1	20·9	208
1902	36·6	19·6	173
1903	34·6	18·2	179
1904	35·9	19·8	195
1905	33·6	19·8	191
1906	33·9	18·4	175
1907	33·5	19·0	162
1908	34·5	18·5	171
1909	33·1	19·4	163
1910	32·5	17·1	149
1911	31·3	19·6	203
1912	31·2	15·9	128
1913	31·9	18·7	169
1914	31·6	17·4	144
1915	26·9	18·4	147
1916	23·9	16·8	126
1917	20·8	16·5	116
1918	22·3	20·3	111
1919	22·5	16·2	111
1920	30·9	12·8	98
1921	29·0	14·8	134

DEATHS.

The number of deaths registered in the County Borough during the year 1921 was 3,714. This gives a death rate of 15.1 per 1,000 of the population. Of the total deaths 852 occurred in public institutions in the district. If the deaths of non-residents which occurred in the district be excluded, and the deaths of residents which occurred beyond the district be included, the nett deaths belonging to the district is 3,647 (1,970 males and 1,677 females), and the death rate 14.8 per 1,000.

The death rate for the 96 great towns of England and Wales was 12.3 per 1,000, and for the whole of England and Wales, 12.1.

The death rate of 14.8 per 1,000 was 2.0 higher than that for 1920.

The death rate for the 96 great towns of England and Wales was 0.2 lower in 1921 than 1920.

The birth rate is lowest in the Stoke-upon-Trent District and highest in the Tunstall District, while the death rate is lowest in Fenton, and highest in Hanley.

The number of deaths, and the death rates, in each of the six districts of the County Borough were as follows:—

				No. of Deaths.	Death Rate.
Burslem	...	...	662	...	15.2
Fenton	...	...	324	...	11.8
Hanley	...	...	1,113	...	16.5
Longton	...	...	578	...	14.9
Stoke	...	...	554	...	14.3
Tunstall	...	...	416	...	14.6

PRINCIPAL CAUSES OF DEATH.

				1921	1920
Phthisis and other Tubercular Diseases	...	...	366	...	346
Congenital Debility and Malformation, including Premature Birth	...	...	366	...	370
Bronchitis	...	...	430	...	365
Pneumonia	...	...	263	...	224
Organic Heart Disease	...	...	285	...	261
Cancer	...	...	252	...	228
Violence	...	...	94	...	103
Diarrhœa and Enteritis	...	...	339	...	118
Nephritis and Bright's Disease	...	...	84	...	82
Influenza	...	...	87	...	54

DEATHS FROM PRINCIPAL ZYMOTIC DISEASES.

				1921	1920
Small-pox	...	...	—	...	—
Enteric Fever	...	...	7	...	2
Diphtheria	...	...	20	...	21
Scarlet Fever	...	...	14	...	40
Whooping Cough	...	...	22	...	8
Measles	...	...	1	...	71
Diarrhœa and Enteritis	...	...	339	...	118

The death rate from the seven principle Zymotic Diseases was 1.64 per 1,000 of the population, compared to 1.00 per 1,000 for the County Borough in 1920. The Diarrhœa death rate accounted for 1.38 per 1,000 compared to 0.47 in 1920.

The following table shows the death rate from the principal Zymotic Diseases compared with the death rate of the 96 great towns: —

			Stoke-on-Trent.	96 Large Towns.	
			1921	1921	
Diarrhœa (under 2 years) per					
1,000 births	...	...	43.7	...	19.3
Measles	...	...	0.00	...	0.08
Diphtheria	...	...	0.07	...	0.15
Scarlet Fever...	...	...	0.05	...	0.04
Whooping Cough	...	...	0.08	...	0.13
Enteric Fever	...	...	0.02	...	0.01

Of the 3,647 deaths in the County Borough, 36, or 0.98 per cent. were not certified either by a registered medical practitioner or by a coroner. In the 96 large towns the percentage of uncertified deaths was 0.7.

Causes of Death			Net Deaths at the subjoined ages of "Residents" whether occurring within or without the District.															Total Deaths whether of "Residents" or "Non- Residents" in Institu- tions in the District
			All Ages	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards	Burslem	Fenton	Hanley	Longton	Stoke	Tunstall	
All Causes	Certified...	...	3611	942	176	110	146	172	436	832	797	658	320	1099	574	549	411	850
	Uncertified	...	36	17	1	...	1	1	2	8	6	4	4	14	4	5	5	2
Enteric Fever	..	...	7	...	...	1	1	1	2	1	1	2	...	4	1	...	..	2
Smallpox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	1	..	...	1	...	...	...	...	...	...	..	1	...	...	...	...
Scarlet Fever	...	...	14	1	1	3	6	3	...	...	...	...	1	2	4	4	3	...
Whooping Cough	...	..	22	9	7	5	1	..	...	...	..	4	...	10	2	6	...	1
Diphtheria and Croup	..	...	20	2	5	7	5	...	1	...	..	4	2	7	1	5	1	1
Influenza	...	...	87	10	6	3	3	7	26	17	15	18	8	29	6	17	9	6
Erysipelas	...	...	14	3	...	...	..	...	2	5	4	5	3	1	...	2	3	...
Phthisis (Pulmonary Tuberculosis)	...	...	292	1	4	1	10	68	115	85	8	68	25	83	51	41	24	45
Tuberculous Meningitis	...	...	25	8	3	1	7	3	1	2	...	4	2	12	3	2	2	5
Other Tuberculous Diseases	...	...	49	14	5	4	10	6	6	4	..	5	4	22	8	5	5	12
Cancer, Malignant Disease	...	...	252	...	1	...	3	2	25	135	86	45	26	69	32	48	32	81
Rheumatic Fever	...	...	9	..	...	..	3	2	1	2	1	2	2	5	...	...	...	3
Meningitis	...	...	27	8	5	3	8	2	1	...	...	4	1	11	5	3	3	17
Organic Heart Disease	...	...	285	1	...	2	5	15	41	100	121	42	35	89	44	39	36	31
Bronchitis	...	...	430	68	24	17	4	2	16	121	178	50	29	127	109	63	52	62
Pneumonia (all forms)	..	...	263	64	49	28	17	14	43	34	14	48	17	94	43	39	22	24
Other Diseases of Respiratory Organs	...	...	34	6	3	3	4	..	4	7	7	2	3	8	7	8	6	14
Diarrhoea and Enteritis	...	...	339	282	30	6	...	1	8	5	7	108	21	112	30	30	38	40
Appendicitis and Typhlitis	...	...	22	...	...	1	6	5	3	6	1	5	1	3	4	4	5	32
Cirrhosis of Liver	...	...	16	...	..	...	...	..	...	12	4	1	..	7	4	2	2	6
Alcoholism	..	...	1	...	...	...	...	...	...	1	..	...	...	...	...	...	1	...
Nephritis & Bright's Disease	...	...	84	3	1	..	5	4	12	38	21	15	10	27	14	9	9	30
Puerperal Fever	...	..	12	...	...	...	...	6	5	1	...	4	1	3	4	...	..	11
Other accidents and diseases of Pregnancy & Parturition																		

POOR LAW RELIEF.

In the County Borough of Stoke-on-Trent are included portions of two Poor Law areas.

The following return with reference to Poor Law Relief is supplied by Mr. T. Wood, Clerk to the Stoke-upon-Trent Union. In the Stoke-upon-Trent Union is included the Rural District of Stoke-upon-Trent in addition to the Hanley, Stoke, Fenton and Longton areas of the County Borough of Stoke-on-Trent:—

OUT-DOOR RELIEF:—

For year ending 31st March, 1914	...	£10,768
„ „ „ 1919	...	£10,893
„ „ „ 1920	...	£14,812
„ „ „ 1921	...	£15,330

Number of persons in receipt of Out-door relief on—

31st March, 1914	...	2,064
31st March, 1919	...	1,294
31st March, 1920	...	1,194
31st March, 1921	...	959

IN-DOOR RELIEF:—

For year ending 31st March, 1914	...	£12,213
„ „ „ 1919	...	£21,808
„ „ „ 1920	...	£26,692
„ „ „ 1921	...	£31,505

Number of persons relieved in the Institution on—

31st March, 1914	...	1,007
31st March, 1919	...	733
31st March, 1920	...	606
31st March, 1921	...	734

The following return with reference to Poor Law Relief is supplied by Mr. J. E. Lowndes, Clerk to the Burslem and Wolstanton Union. The return relates to the three Parishes of Burslem, Tunstall and Goldenhill, which are included in the area of the County Borough.

TOTAL COST OF OUT-DOOR RELIEF:—

	£	s.	d.
1914 ...	4161	5	9
1918 ...	5156	18	4
1919 ...	5950	2	11
1920 ...	7691	9	9
1921 ...	9825	5	6

NUMBER OF CASES AND PERSONS RELIEVED:—

	Cases.	Persons.
1914 ...	815	1916
1918 ...	559	1212
1919 ...	579	1215
1920 ...	561	1401
1921 ...	802	2527

NUMBER WHO HAVE RECEIVED OUT-DOOR MEDICAL RELIEF:—

1914	...	...	...	474
1918	...	...	...	289
1919	...	...	...	203
1920	...	...	...	225
1921	...	...	...	288

TOTAL NUMBER CHARGEABLE IN INSTITUTION, AND COST OF IN-DOOR RELIEF:—

			Number.	Cost.		
				£	s.	d.
1914	...	...	1114	3548	18	3
1918	...	...	436	4739	0	4
1919	...	...	487	5381	0	10
1920	...	...	609	6304	15	6
1921	...	...	599	6732	10	5

GRATUITOUS MEDICAL RELIEF.

NORTH STAFFS. INFIRMARY.

Number of Civilian In-Patients treated annually from November 1st, 1909, to October 31st, 1921:—

1909-10	...	...	2,193
1910-11	...	...	2,262
1911-12	...	...	2,370
1912-13	...	...	2,322
1913-14	...	...	2,549
1914-15	...	...	2,852
1915-16	...	...	2,632
1916-17	...	...	2,803
1917-18	...	...	2,947
1918-19	...	...	3,056
1919-20	...	...	3,440
1920-21	...	...	3,554

The number of Out-Patients for the year ending October 31st, 1921, was 24,570, as compared with 24,111 for the year ending October 31st, 1920.

In addition to the North Staffs. Infirmary there are two other Voluntary General Hospitals in the area, viz.: Haywood Hospital, Burslem, and the Longton Cottage Hospital. The Haywood Hospital has 35 beds for In-Patients, and an Out-Patient Department. The Longton Cottage Hospital has 42 beds for In-Patients, and an Out-Patient Department.

There is also a Special Institution in connection with the North Staffordshire Cripples' Aid Society for dealing with Orthopædic cases, including surgical cases of Tuberculosis.

CLOSET ACCOMMODATION.

There are in the Borough 44,301 water closets, but of these there are approximately 13,801 which have no flushing system attached. There are 907 pail closets and about 2,635 cesspit closets or privies.

The number of privies and pail closets converted into water closets during the years 1911 to 1921 is as follows:—

Year					Number
1911	...	...	...	...	366
1912	...	...	...	...	338
1913	...	...	...	...	658
1914	...	...	...	...	1150
1915	...	...	...	...	498
1916	...	...	...	...	38
1917	...	...	...	...	35
1918	...	...	...	...	45
1919	...	...	...	...	68
1920	...	...	...	...	181
1921	...	...	...	...	766

SCAVENGING.

The following table gives the sanitary accommodation of the houses in the Borough in certain years.

	1911	1914	1920	1921
Number of houses including new houses erected and deducting demolitions	49,071	49,213	49,147	49,201
Number of water closets ...	18,601	21,105	22,640	23,480
Number of Privies ...	6,428	4,287	3,400	2,635
Number of pail closets ...	1,285	1,009	908	907
Number of hand-flushed closets ...	13,934	13,795	13,811	13,801
Number of slop water closets ...	7,142	7,091	7,027	7,020
Number of houses served by ashpits ...	24,825	21,059	18,767	18,299
Number of ashbins ...	24,670	28,702	32,396	32,864

Ashbins, are, as a rule, emptied once weekly, but those used in connection with shops situated in the centres of the towns, being upwards of 1,000, are emptied daily.

The following table shews the number of times ashpits and cesspit closets have been emptied during the years 1915 to 1921:—

ASHPITS.

		Tunstall	Burslem	Hanley	Stoke	Fenton	Longton
1915	...	7	6	7	7	9	6
1916	...	11	7½	7	7	9	6½
1917	...	12	7	6½	9½	9	6
1918	...	11	8	7	9	7	5
1919	...	7	6	6	7	8	6
1920	...	8	7	5	8	9	6
1921	...	9	6	6	9	7	8

CESSPIT CLOSETS.

		Tunstall	Burslem	Hanley	Stoke	Fenton	Longton
1915	...	12	5	11	9	9	11
1916	...	12	7	12	7	10	11
1917	...	12	8	12	9	11	11
1918	...	12	7	12	9	11	12
1919	...	12	8	12	10	12	12
1920	...	12	9	12	11	12	12
1921	...	12	11	12	10	12	12

Rochdale Pails are emptied regularly once weekly.

The average number of teams employed by the Corporation during the year 1921 was 59. Of these 21 were hired, and 38 owned by the Corporation. The number of teams owned by the Corporation has gradually been increased. These teams are exclusive of two motor vehicles.

Towards the middle of April the coal strike began to show its effects in a greatly increased amount of ashes caused by the use of inferior coal. In order to deal with the extra refuse 24 extra teams and a Ford One Ton Motor were employed.

During May we were compelled to resort to the use of tips in the various parts of the Borough, the Destructors being quite unable to deal with the extra refuse.

By the end of August the extra refuse caused by the coal strike had been practically cleared away and the number of teams employed considerably reduced.

The Two Ton Napier Wagon and the One Ton Ford have been proved to be both economical and very useful in the outer parts of the Borough.

The tips brought into service during the coal strike in almost every instance took fire and caused considerable nuisance, but fortunately none were very near to any dwellinghouse and no complaints were received except in the case of the Cottage Tip, Chatterley Road. The nuisance which arises from tipping house refuse could not be better demonstrated than was shown during the summer of 1921.

The following table shews the amount of refuse removed during the past three years:—

	1919	1920	1921
Loads destroyed	38,253	39,844	37,948
Loads tipped	10,600	15,621	24,769
Total loads of refuse removed ...	48,853	55,465	62,717
Weight destroyed (tons)	42,730	45,051	46,490
Tubs of nightsoil removed ...	9,043	8,520	7,356

No Nightsoil is now tipped on land. It is all dealt with at the various sewage works.

There are four Destructors in the area, one each at Burslem, Hanley, Stoke and Longton, and capable of dealing with 206 tons of refuse per day of three shifts.

The following is a record of the work done at each of the Destructors:—

HANLEY DESTRUCTOR WORKS.

The weight of refuse destroyed during the year 1921 was 15,015, and 899 tons were tipped.

The weight of mortar made and sold was 506 tons.

Concrete Slabs manufactured, 1,140 square yards.

Concrete Slabs sold, 615 square yards.

Scrap Tin sold, 15 tons, 14 cwts.

Crushed Clinker sold, 170 tons.

LONGTON DESTRUCTOR WORKS.

Refuse destroyed, 11,304 tons.

Mortar made and sold, 1,397 tons.

Scrap iron and tin sold, 49 tons, 5 cwts., 2 qrs.

BURSLEM REFUSE DESTRUCTOR WORKS.

During the year 8,122 tons, 3 cwts. of refuse were destroyed.

Scrap iron sold, £3 os. od.

STOKE REFUSE DESTRUCTOR WORKS.

Weight of refuse destroyed during the year, 12,049 tons, 8 cwts.

Weight of mortar made and sold, 1,949 tons, 19 cwts.

Scrap iron sold, £5 6s. od.

In addition to the Destructors, ashes were tipped during the year at:—Cottage Tip, Tunstall; Little Chell Farm; Clive's, Newfields; Blood's Tip, Latebrook; Sytch, Burslem; Sun Street, Hanley; Norden's, Cobridge; Leek Road, Sewage Works; Sutherland Tip, Trent Vale; Fenton Park, Park Road, Bailey's Tip, Fenton; and Balfour Tip, Longton.

The total cost of the removal and disposal of nightsoil and ashes during the year ending 31st March, 1921, was £52,694.

SALVAGE.

WASTE PAPER.

During the year a large amount of waste paper has been destroyed by fire. Throughout the year, the market value of good quality paper very rarely exceeded One Pound per Ton, and very often went as low as 10/- per ton, while inferior grades such as cardboard, etc., were absolutely unsaleable.

The amount sold during the year was 36 tons.

SCRAP IRON.

One hundred and forty four tons of scrap iron were sold during the year. The value of the material was very low indeed, ranging from 15/- per ton to 30/-. This price of course is not profitable, but were the material not disposed of in this manner, expense would be entailed in carting it away to the tip, resulting in no income from it whatsoever, though we are compelled to dispose of the stuff.

WASTE ELIMINATOR PLANT.

This plant has been kept working all the year. The sales have been fairly good and the prices of the products have been reduced to meet competition. The following table shows the material dealt with.

MATERIAL RECEIVED.

MEAT.			FISH.			OFFALS.			BLOOD.		
T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.
40	15	1	151	17	0	6	16	0	11	16	2

MATERIAL PRODUCED.

MEAT & BONE

MEAT MEAL.			MEAL.			FISH MEAL.			FATS.			DRIED BLOOD.		
T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	T.	C.	Q.
13	11	0	5	14	0	44	19	0	4	1	1	3	11	3

The cost of production was £1,328 13s. 2d., and the amount realised for the products £1,533 6s. 9d., leaving stock in hand to the value of £239 0s. 0d.

SANITARY INSPECTION OF DISTRICT.

During the year 1921, 16,672 nuisances were dealt with, compared with 15,484 in 1920.

Table of nuisances dealt with:—

Districts		1	2	3	4	5	6	7	8	Total
Houses completely examined on account of	Infectious Diseases	100	229	132	124	99	189	70	146	1089
	Alleged Nuisances	4	36	28	59	—	1	3	83	214
	House Inspection ...	33	3	4	—	1	—	5	—	46
Houses examined only as to	Occupants ...	—	—	1	1	—	—	—	3	5
	Drainage ...	—	16	50	7	1	3	—	34	111
	Structure ...	—	11	77	1	—	—	—	6	95
Total number of houses examined ...		137	295	292	192	101	193	78	272	1560
Total number of houses in which defects were found ...		40	50	186	109	35	57	33	150	660
Number of defects in above houses ...		90	199	793	597	107	237	179	491	2693

The number of Informal Notices served during the year was 2,938; and the number of Statutory Notices 3,817.

Complaints.

During the year, 2,529 complaints were received and investigated, 1,212 at the office, and 1,317 by the District Inspectors. 378 of the total were discovered to be unfounded.

Included in the total of 1,212 are 496 referred from the Health Visitors.

The following matters brought to the notice of the Department during the year were referred to the Borough Surveyor:—

Dangerous structures	...	...	22
Offensive sewer ventilators	...	...	9
Stopped sewers	...	...	13
Stopped surface water gullies	...	...	2
Defective street paving	...	...	5
Other matters	...	...	55
Total			106

Overcrowding.

Complaints were received with regard to 52 cases of overcrowding. These were investigated and 30 of the complaints were unfounded and in 22 instances the fact of overcrowding was established. In 18 of these the overcrowding was subsequently remedied. It has not been found possible to deal with overcrowding in any comprehensive way on account of the great shortage of houses and the increasing difficulty of getting accommodation.

Out of 1,000 consecutive houses visited, 307 were found to contain two or more families; in 109 cases there was more than an average of two persons per room.

A classification of the various defects discovered and dealt with will be found in the following table:—

District ...	1	2	3	4	5	6	7	8	Total Nuisances Found
Houses dirty	7	27	18	17	23	11	37	21	161
" overcrowded	...	...	2	1	8	7	3	7	28
" damp or dilapidated ...	769	944	531	679	603	537	419	430	4912
" badly lighted or ventilated	29	22	54	21	12	18	12	66	234
Drainage defective	62	32	83	113	85	44	74	73	566
" no disconnection	...	...	9	16	8	15	5	...	53
" want of	8	36	2	5	7	1	2	4	65
" stopped	221	178	289	170	162	134	112	396	1662
Sinks defective or required ...	52	60	35	45	47	25	48	39	351
Bath, lavatory and sink waste pipes untrapped	...	4	2	15	...	..	...	...	21
Other drainage defects	48	15	67	39	55	71	94	54	443
Privies defective	8	1	...	1	9	11	12	2	44
Additional closets required ...	...	...	..	8	9	1	...	...	18
Defects in W.C's.	152	249	449	286	250	322	430	232	2370
W.C's. without flush	9	42	14	9	7	5	...	12	98
Waste water closets defective ...	1	5	2	...	...	1	..	...	9
Ashpits open	26	21	31	118	30	40	7	12	285
" required	27	35	64	74	97	13	3	29	342
" structure defective... ..	21	22	18	2	5	1	11	7	87
Ashbins defective	276	52	195	249	156	253	110	249	1540
Outbuildings—defects	45	16	59	9	38	16	9	29	221
Paving... ..	206	147	77	110	117	75	114	119	965
Houses without water supply ...	25	40	31	31	16	29	21	27	220
Other house nuisances	34	22	70	30	44	44	118	41	403
Accumulations dealt with	167	101	64	48	52	50	21	54	557
Manure receptacles	2	9	1	1	1	3	...	4	21
Keeping of animals	18	33	9	15	39	19	15	28	176
Other outside nuisances	108	20	150	127	60	75	111	159	810
TOTALS ...	2321	2133	2326	2239	1940	1821	1788	2094	16662

OTHER WORK DONE.

Revisits to Nuisances	3456	2605	3506	3559	2595	4383	3979	5389	27481
" infectious disease	86	24	8	40	64	77	100	37	436
Visits for other causes	599	477	591	906	484	759	623	857	5296

Inspection of Drainage Work.

District ...	1	2	3	4	5	6	7	8	Total
New drains inspected ...	—	10	9	16	2	34	8	3	82
Revisits while work in progress...	10	29	65	161	8	13	69	11	366
Drains Inspected after reconstruction...	6	3	30	41	9	13	12	10	124
Revisits while work in progress .	12	12	33	27	17	29	18	111	259
Other visits on account of drainage work ...	2	13	20	25	17	87	17	33	214

Drain Testing.

Chemical:—Negative	...	...	414
Positive	...	...	205
Colour:—Negative	...	...	55
Positive	...	...	30
Smoke:—Negative	...	...	134
Positive	...	...	21
Hydraulic:—Negative	...	...	2
Positive	...	...	—
Total:—Negative	...	...	605
Positive	...	...	256

Of the above tests 258 were applied on account of infectious disease, 355 were made on receipt of complaints, and 450 were made during the progress of drainage work.

Voluntary Conversion of Privies.

The voluntary conversion of privies, pail closets and other forms of closets was practically at a standstill during the year, as will be seen from the following figures:—

Privies repaired	...	...	...	0
„ abolished	...	...	...	10
„ converted	...	...	...	66
Pails converted	...	...	...	1
Waste water-closets converted	...	...	...	7
New water-closets provided...	...	...	...	2
Hand flushed closets converted	...	...	...	10

The Council contributed £3 per conversion towards the cost of voluntary conversions of 32 privies, 1 Rochdale pan and 4 waste water closets, and a contribution of 30/- towards the cost of the provision of 12 cisterns and water supply to 12 hand flushed closets. Some of the contributions paid were in respect of work carried out during the previous year. The payment of contributions by the Council was discontinued from the beginning of May on grounds of economy.

Conversion of Privies.

Public Health Acts Amendment Act 1907.

During the year the work of converting privies into water closets has continued in Longton and proceeded with in Fenton. The number of conversions completed under this scheme by the end of the year was 645, and 54 were in progress.

RECORD OF INSPECTIONS AND WORK DONE DURING THE YEAR ENDED 31ST DECEMBER, 1921.

Privies visited	...	...	...	626
Privies re-visited	...	...	...	11,627
Other visits...	...	...	...	1,665
Appointments	...	...	...	95
Re-visits during progress of work	...	...	...	3,847
Total	...	...	...	17,860
Openings under Section 41, Public				
Health Act, 1875	...	...	...	9

DRAIN TESTS	COLOUR		SMELL		ROCKETS		TOTAL	
	Neg	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.
New Drains ..	9	...	...	...	679	47	688	47
Repaired Drains ..	8	..	3	..	10	7	21	7
Old Drains ...	...	...	...	...	...	3	...	3
TOTAL ..	17	...	3	...	689	57	709	57

SUMMARY OF WORK OF CONVERSION OF PRIVIES, YEAR ENDING, 1921.

No. of privies for which notices have been served	...	524
No. of privies for which contracts have been sent out	...	671

No. of privies completed:—

(a) By contract	...	...	...	645
(b) Voluntarily	...	...	...	54
				699

No. of privies in progress:—

(a) By contract	...	...	...	57
(b) Voluntarily	...	...	...	1
				58

Legal Proceedings.

Proceedings have been necessary to enforce the compliance of notices in 28 cases.

	£	s.	d.
In two cases the Court made the necessary orders and imposed costs amounting to	3	9	0
In twenty-six cases proceedings were withdrawn on payment of Costs, the work having been complied with after service of the summons, the Costs amounting to	5	12	0
One instance the using of a dwelling-house for business purposes without permission of the Council, the Court made the necessary orders and imposed costs amounting to	4	7	0
The Department carried out work to abate nuisances after the service of notices which were not complied with by the owners, the total cost of which was...	429	13	0

Ashbins.

During the year 2,190 notices were served on owners requiring them to provide sufficient ashes accommodation. In many cases, on the expiration of the time stated in the notices, it was found that bins had not been provided. The Corporation delivered them and afterwards the owners were charged with the cost.

The number thus delivered during the year was 1,060.

Bye-Laws.

Byelaws are in force in the County Borough with respect to:—

New Street and Buildings;
Slaughter Houses;
Nuisances;
Common Lodging Houses;
Dairies, Cowsheds and Milkshops;
Public Conveniences;
Houses Let in Lodgings;
Offensive Trades;
Removal of Offensive and Noxious Matters.

Offensive Trades.

There are in the area:—

Two Knacker's Yards;
Two Skin Markets;
Several Bone-Burning Works;
Several Marine Stores, Tripe Boilers, and Gut Scrapers;
One Fat Melter;
A large number of Fish Fryers.

A list of Offensive Trades has been scheduled by the Authority and Byelaws are in force for their control.

The list of Scheduled Trades is as follows:—Fish friers, Potato friers; Dealers in rags, bones, fat, animal skins or other like matter in an offensive condition; manure manufacturers; brick burners, gut scrapers, bone burners, tanners, leather dressers, fat melters or fat extractors, glue makers, size makers (except Potters' sizes), and blood driers.

KNACKER'S YARDS.

There are now two knacker's yards in the Borough; they have been visited regularly during the year and found in order on each visit. No complaints have been received in reference to them.

SKIN YARDS.

There are two skin yards in the Borough, one at Cross Street, Stoke, and one at Mollart Street, Hanley.

Three complaints were received during the year, and on investigation it was found that the source of the nuisance, if any, had been removed.

GUT SCRAPING.

There are four premises specially used for gut scraping in the Borough. Three are connected with private slaughter-houses and occupied by wholesale butchers. In each case the premises are kept very clean and on no occasion has there been any cause for complaint on inspection. Most of the butchers who have private slaughter-houses clean the guts from animals slaughtered on their own premises.

FAT MELTING.

This is carried out on a large scale at the public abattoirs. Up-to-date machinery has been installed and no complaints have been received of any nuisance arising.

TRIPE CLEANING.

There are many tripe shops in the Borough, but in most cases the tripe is bought ready cleaned. The greater part of the tripe cleaned in the Borough is dealt with at four establishments. The premises on various visits have been found clean and in order.

MARINE STORES.

There are 24 Marine Stores, and lead, metal, rags, bones and bottles are the chief materials dealt with.

FRIED FISH SHOPS.

During the year in fifteen instances permission has been given for premises to be used for the purpose of fish frying. 483 visits have been made to the premises used for this purpose. 302 defects were found and dealt with. The condition of the utensils, pans, etc., was generally found to be satisfactory.

Common Lodging Houses.

There are 12 common lodging-houses in the County Borough of Stoke-on-Trent, compared with 13 in 1920. During the year 468 inspections of common lodging-houses were made—446 by day, and 22 by night. Forty-six notices were served for the rectifying of minor offences, which were all complied with.

The 12 lodging-houses were registered for the accommodation of 381 persons per night. There were, according to the returns sent in, 82,618 persons accommodated during the year, as compared with 85,805 in 1920.

The premises are in the majority of cases old houses which have been adapted for the purpose and one or two of the buildings are in a very poor condition.

Houses Let in Lodgings.

There are now on the register 119 houses. Four hundred and seventy-nine inspections have been made during the year. Thirty-four defects were found, these have since been attended to.

Smoke Nuisance.

During the year, 184 timed observations of half-an-hour each have been taken, as compared with 152 in the previous year.

Six complaints have been received and investigated, and 74 Notices have been served for the abatement of smoke nuisances.

A considerable amount of money has been spent during the year by various firms in improving their boiler plants, which has increased the efficiency of each plant and minimised the smoke nuisance.

Some manufacturers are now becoming more interested in fuel economy, and are taking steps to obtain a higher efficiency from their boiler at the lowest cost.

There is no doubt that with improved design of furnaces and more intelligent firing, the smoke nuisance can be very much reduced.

In addition to the above, 9 long period or continuous observations have been taken during the firing of ovens and kilns, and I append herewith a few particulars on such observations:—

RESULTS.

No. 1. Biscuit oven firing. 75 hours:—

2 hours, 49 minutes	Black smoke.
24 hours, 27 minutes	Moderate smoke.
47 hours, 44 minutes	No smoke.

The average amount of black smoke emitted per hour being 2.25 minutes.

No. 2. Biscuit oven firing. 52 $\frac{1}{4}$ hours:—

3 hours, 3 minutes	Black smoke.
15 hours, 4 minutes	Moderate smoke.
34 hours, 8 minutes	No smoke.

Average black smoke per hour being approximately 3 $\frac{1}{2}$ minutes.

No. 3. Glost oven firing. 33 hours:—

0 hours, 41 minutes Black smoke.
11 hours, 6 minutes Moderate smoke.
21 hours, 13 minutes No smoke.

Average black smoke per hour being 1.24 minutes.

No. 4. Glost oven firing. 21-5/6th hours:—

0 hours, 20 minutes Black smoke.
7 hours, 39 minutes Moderate smoke.
13 hours, 51 minutes No smoke.

This gives an average of black smoke of 0.9 minutes per hour.

No. 5. Enamel kiln firing. 12 hours:—

1 hour, 26 minutes Black smoke.
3 hours, 37 minutes Moderate smoke.
6 hours, 57 minutes No smoke.

Average black smoke 7.16 minutes per hour.

No. 6. Enamel kiln firing. 8-2/3rd hours:—

2 hours, 11 minutes Black smoke.
4 hours, 38 minutes Moderate smoke.
1 hour, 51 minutes No smoke.

Average black smoke 15.1 minutes per hour.

No. 7. Enamel kiln firing. 10-5/6th hours:—

2 hours, 17 minutes Black smoke.
4 hours, 22 minutes Moderate smoke.
4 hours, 1 minute No smoke.

Average black smoke 12.6 minutes per hour.

No. 8. Enamel kiln firing. 10 hours:—

2 hours, 25 minutes Black smoke.
2 hours, 24 minutes Moderate smoke.
5 hours, 11 minutes No smoke.

Average black smoke 14½ minutes per hour.

No. 9. Enamel kiln firing. 10 hours:—

1 hour, 14 minutes Black smoke.
4 hours, 16 minutes Moderate smoke.
4 hours, 30 minutes No smoke.

Average black smoke emitted being 7.4 minutes per hour.

OBSERVATIONS.

Boiler stacks	...	...	...	...	174
Oven stacks	...	...	...	...	6
Kiln stacks	...	...	...	...	13

INSPECTIONS OF:—

Boilers	...	...	...	...	130
Ovens	...	...	...	...	25
Kilns	...	...	...	...	36
Re-inspection of premises	...	...	...	...	52
Interviews with owners and occupiers	...	...	...	...	64
Interviews with Engineers and Firemen	...	...	...	...	123
Warnings given	...	...	...	...	24
Preliminary notices served	...	...	...	...	4
Statutory notices served	...	...	...	...	70
Improvements effected	...	...	...	...	23
Visits for other causes	...	...	...	...	82
Prosecutions	...	...	...	...	1

The following is a summary of the alterations made and appliances fitted in order to prevent the emission of excessive quantities of smoke:—

Number of new boilers put down...	...	6
Patent smoke preventers fitted	...	7
Air grids or ventilators repaired or replaced	...	10
Chimneys raised or re-constructed	...	2
Kilns re-constructed	...	1
Ovens re-constructed	...	2
Other improvements carried out	...	8

Rats and Mice (Destruction) Act, 1919.

An Inspector was appointed by the Council in March, 1920, and has been continually at work since that date.

The number of rats known to have been killed during the year, and the methods employed were as follows:—

Poisons	...	1,049
Dogs and Ferrets	...	2,519
Traps	...	1,662
Bird Lime	...	439
		5,659

The number of visits paid to various premises is as follows:—

Factories	...	576
Farms and Stables	...	698
Shops and Bakehouses	...	901
Private houses	...	1,383
Warehouses	...	241
Collieries and Ironworks	...	51
Garden allotments	...	44
Hotels and Restaurants	...	172
Schools and Public Buildings	...	81
Tips	...	31
Picture Palaces	...	32
		4,210

METHODS USED:—

BIRD LIME. Splendid results have been obtained from bird lime in shops, private houses and warehouses. With care a tray will last for three or four months, it should be slightly heated once a week. It is not suitable for use in China and Earthenware Factories on account of the dust and heat.

HUNTING WITH DOGS AND FERRETS. Ferretting has been found to be the best method for open spaces or in buildings where there is plenty of room for dogs to kill.

POISONS. Phosphorus poisons have given splendid results when not used more than once a month.

BARIUM CARBONATE. Best white barium has given very good results when mixed with lard and oatmeal and spread on fresh bread, cut up in small pieces.

LIQUID SQUILLS. This has given good results when used in conjunction with phosphorus and barium poisons. Bread soaked in equal parts of fresh milk and squills, dried off, and put down in runs has been found a useful method.

Schools.

The Medical Officer of Health is not the School Medical Officer.

The schools were inspected four times during the year in relation to sanitary conditions and water supply. Lists of the defects found were sent on to the Education Authority; they are being dealt with.

School Closure.

One school was closed on account of Scarlet Fever during the year.

Milk Supply.

Milkshops and Purveyors of Milk.

The following statement shows the number of purveyors of milk registered under the Dairies, Cowsheds and Milkshops Order, 1885:—

Number on register at 31st December, 1921	...	366
Number registered during the year	...	38
Visits paid		2174

These premises are usually kept in a cleanly state, and much improvement has been noticed in recent years in the methods of storing and handling the milk. Such points as the covering of the milk receptacles and keeping them in specially prepared cupboards away from flies and dust receive special attention.

Cowsheds.

The number of cowsheds on the register is 74. Visits paid 379. The number of dairies on the register is 73. Visits paid 87.

All the sheds have been lime-washed at least twice during the past year, and more often in a number of cases.

The approximate number of cows throughout the district is 470, as compared with 485 in the previous year.

A higher standard of cleanliness should be adopted.

The dairies in connection with the farms and cowsheds are as a rule, kept in a satisfactory manner.

Two hundred and ninety-six samples of milk were taken during the year and 19 were proved to be not genuine on analysis. Four samples contained preservative.

No specimens of milk were taken for examination for the presence of Tubercle Bacilli.

Milk and Cream Regulations, 1912 and 1917.

Report for the Year ending December, 1921.

I. MILK AND CREAM NOT SOLD AS PRESERVED CREAM.

Number of samples examined for the presence of a Preservative:

Milk	...	...	...	296
Cream	...	...	...	4

Number in which a Preservative was reported present:

Milk	...	...	...	4
Cream	...	...	...	0

No. of Sample	Percentage of Perservative found in each Sample
30	0·017 per cent. of Boric Acid (11·9 grains per gallon)
55	0·086 per cent. of Boric Acid (60·2 grains per gallon)
56	0·088 per cent. of Boric Acid (61·6 grains per gallon)
58	0·028 per cent. of Boric Acid (19·6 grains per gallon)

2. CREAM SOLD AS PRESERVED CREAM.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the labels as to the preservatives were correct:—

(1)	Correct statements made	...	8
(2)	Incorrect statements made	...	0

No. of Sample	Percentage of Preservative found in each Sample	Percentage stated on Statutory Label
49	Fat ... 45·77 per cent. Boric Acid ... 0·35 "	Containing Boric Acid not exceeding 0·4 per cent.
50	Fat ... 45·39 " Boric Acid ... 0·34 "	
51	Fat ... 52·50 " Boric Acid .. 0·31 "	" "
53	Fat ... 41·52 " Boric Acid ... 0·20 "	" "
260	Fat ... 54·62 " Boric Acid ... 0·30 "	" "
297	Fat .. 54·21 " Boric Acid .. 0·38 "	" "
298	Fat ... 55·15 " Boric Acid ... 0·31 "	" "
453	Fat ... 40·08 " Boric Acid ... 0·36 "	" "

(b) Determinations made of Milk Fat in Cream sold as Preserved Cream:—

(1)	Above 35 per cent.	...	...	8
(2)	Below 35 per cent.	...	...	0

(c) Instances where (apart from analysis) the requirements as to labelling of declaration of Preserved Cream in Article V. (1) and the provision in Article V. (2) of the Regulations have not been observed:—

None.

(d) Particulars of each case in which the Regulations have not been complied with:—

MILK SAMPLE NO. 30.

Analyst's Report:—"I am of the opinion that the said "sample contained 0.017 % (11.9 grains per gallon) of Boric "Acid."

Case was heard at the Stipendiary Magistrates Court, Stoke-on-Trent before B. C. Brough, Esq., on March 18th, 1921. The defendant was fined £3 3s. od. and ordered to pay costs of £2 2s. od.

MILK SAMPLE NO. 55.

Analyst's Report:—"I am of the opinion that the said "sample contained 0.086 % of Boric Acid (60.2 grains per "gallon)."

Case was heard at the Stipendiary Magistrates Court, Stoke-on-Trent, before B. C. Brough, Esq., on March 18th, 1921. The defendant was fined £3 3s. od. and ordered to pay costs of £2 2s. od.

MILK SAMPLE NO. 56.

Analyst's Report:—"I am of the opinion that the said "sample contained 0.088 % of Boric Acid (61.6 grains to the "gallon)."

As this sample was afterwards proved to be from the same churn as Sample No. 55, no action was taken.

MILK SAMPLE NO. 58.

Analyst's Report:—"I am of the opinion that the said "sample contained 0.028 % of Boric Acid (19.6 grains per "gallon)."

Case was heard at the Stipendiary Magistrates Court, Stoke-on-Trent, before B. C. Brough, Esq., on March 18th, 1921. The defendant was fined £2 2s. od. and ordered to pay costs of £2 2s. od.

3. THICKENING SUBSTANCES.

Any evidence of their addition to Cream or Preserved Cream.

Cream	...	...	...	0
Preserved Cream	...	...	...	0

4. OTHER OBSERVATIONS.

Fresh cream is almost unobtainable in this district, Preserved Cream and a tinned Cream of Swiss and Danish origin being most in evidence.

Other Foods.

A special Inspector devotes the whole of his time to the inspection of slaughter-houses, food, the supervision of premises where food is manufactured and stored, and premises such as Greengrocers' Shops, Tripe Cleaning premises, Cold Stores, Wholesale Fruit Stores, Grocers' Shops, premises in which sausages and meat pies are made, &c. He is assisted in this work by a second special Inspector for part of his time.

During the year ending December 31st, 1921, 15,251 visits were paid, compared with 17,023 during the previous year, as follows:—

2,510 visits were paid to slaughter-houses in the Borough.
 5,832 to meat shops, English and Foreign.
 1,784 to fish shops, retail and wholesale.
 741 to markets, and
 4,384 to other premises.

Carcases, etc., Examined.

Carcases of home-killed animals examined, 72,640.

Frozen and chilled meat, etc., 47,108.

Rabbits, English and Foreign, 29,552 couples.

Also a large quantity of bacon, cheese, ham, eggs, butter, fish, tinned goods, fruit and vegetables.

Weight of meat, &c., surrendered:—

Beef	...	...	...	45,610 lbs.
Bovine organs and offal	...	...	...	1,159 „
Mutton	...	...	...	14,893 „
Veal	...	...	...	2,065 „
Pork	...	...	...	8,075 „
Tinned Goods	...	...	...	2,105 „
Bacon	...	...	...	1,240 „
Rabbits	...	...	...	4,085 „
Fish	...	...	...	2,873 „
Eggs	...	...	...	1,140 „
Tomatoes	...	...	...	960 „
Tripe	...	...	...	5,400 „
Butter	...	...	...	60 „
Cheese	...	...	...	215 „
Fruit	...	...	...	3 026 „
Vegetables	...	...	...	2,415 „

95,321 „

or 42 tons, 11 cwts., 0 qr., 9 lbs.

Meat seized:—

Beef	...	...	...	450 lbs.
Tinned goods	...	...	...	1,570 „
				2,020 „

The whole of the meat found to be unfit for food is now dealt with at the Meat Eliminator Plant.

Prosecutions.

	Offence Committed	Penalty
(No. 1 CASE).		
1st Defendant ...	Being in possession for purposes of sale portions of cow and an immature calf.	Fined £ s. d. Costs 21 0 0 4 8 0
2nd " ...	For aiding and abetting in the above case.	Fined 4 0 0 Costs 3 0 0
3rd " ...	Ditto do.	Fined 2 2 0 Costs 3 0 0
(No. 2 CASE).		
1st Defendant ...	Being in possession of large quantity of tinned goods for purpose of sale for human consumption.	Fined 30 0 0 Costs 3 3 0
2nd " ...	For selling the above-mentioned tinned goods for first Defendant.	Fined 10 0 0 Costs 3 3 0
(No. 3 CASE).		
	For depositing for the purposes of sale unsound tinned goods.	Fined* nil. Costs 3 3 0
	For exposing for sale unsound tinned goods.	Fined 25 0 0 Costs 3 3 0
	* Summons for depositing was withdrawn on payment of Costs.	

Slaughter-houses.

There are 63 slaughter-houses in the County Borough (including the Corporation Abattoirs) compared with 63 last year.

			Total		Registered		Licensed		Vacant
Longton	...	...	12	...	12	...	0	...	1
Hanley	...	...	15	...	10	...	5	...	0
Burslem	...	...	13	...	10	...	3	...	1
Tunstall and Goldenhill			10	...	8	...	2	...	0
Stoke	...	...	5	...	4	...	1	...	0
Fenton	...	...	8	...	8	...	0	...	0
			—		—		—		—
			63		52		11		2
				In 1914		In January 1921		In December 1921	
Registered	...	...	72	...	52	...	52	...	52
Licensed	...	...	11	...	11	...	11	...	11
			—		—		—		—
Total	...	...	83		63		63		63

78 Personal Notices were served throughout the year for the renewal of limewashing of slaughter-houses, lairs, etc., and also for the replacing of worn out garbage vessels. In every case the notices were complied with.

Many private slaughter-houses are unfit for the purposes for which they are used. A new up-to-date public abattoir is required.

ICE CREAM SHOPS. During the year 183 visits have been made to these premises. The defects found and dealt with were 19. The general condition of the premises and utensils was satisfactory.

SALE OF FOOD AND DRUGS ACTS.

The number of Samples taken for Analysis by the Public Analyst during the past year was 550, and on this page is a tabulated statement showing the number and nature of the articles dealt with, results of Analysis and of the proceedings instituted under the Acts.

Total number of Samples submitted for Analysis	Formal	Informal	Results of Analysis		Remarks
			Genuine	Not Genuine	
1 Almond Flavouring Powder	1	...	1	..	
5 Arrowroot	5	...	5	..	
2 Bi-carbonate of Soda ...	1	1	2	..	
1 Black Currant Jam ...	1	...	1	...	
3 Blanc Mange Powder ...	2	1	3	...	
30 Butter	23	7	30	...	
1 Baking Powder	1	...	1	...	
1 Brawn	1	...	1	...	
1 Brown Sugar	...	1	1	...	
14 Cocoa	6	8	14	...	
2 Compound Liquorice Powder	2	...	2	...	
8 Custard Powder	7	1	8	...	
3 Corn Flour	3	...	2	1	Sample No. 200 contained 100% of rice flour.
1 Chicory	1	...	1	...	
2 Castor Oil	...	2	2	...	
3 Cinnamon	2	1	3	...	
1 Citrate of Magnesia ...	1	...	1	...	
2 Condensed Milk	...	2	2	...	
2 Cream of Tartar	...	2	2	...	
3 Camforated Oil	1	2	3	...	
1 Dried Milk (Glaxo) ...	..	1	1	...	
1 Friar's Balsam	...	1	1	...	
13 Ground Ginger	11	2	13	...	
5 Ground Rice	2	3	5	...	
10 Ground Almonds	1	9	10	...	
3 Glycerine	2	1	3	...	
2 Honey	2	...	2	...	
1 Ipecacuanha Wine ...	...	1	1	...	
11 Lard	10	1	11	...	
12 Margarine	12	...	12	...	
296 Milk	296	...	277	19	
3 Meat Paste	3	...	3	...	
2 Mixed Spice	...	2	2	...	
10 Mince Meat	6	4	10	..	
2 Olive Oil	1	1	2	...	
17 Pepper	16	1	17	...	
9 Preserved Cream	9	..	9	...	
2 Sterilised Milk	...	2	2	...	
9 Self Raising Flour ...	7	2	9	..	
1 Semolina	...	1	1	...	
1 Sweet Spirit of Nitre ...	...	1	1	...	
1 Spirit of Turpentine ...	1	...	1	...	
2 Sausage	2	...	2	...	
1 Strawberry Jam	...	1	1	..	
15 Tea	2	13	15	...	
4 Tinned Cream	2	2	4	...	
2 Tapioca	2	...	2	...	
1 Tincture of Rhubarb...	...	1	1	...	
27 Vinegar	27	...	27	...	
550	472	78	530	20	

Formal Samples, 472. Informal Samples, 78. Genuine, 530. Not Genuine, 20.

All Informal Samples were taken by Agents.

Prosecutions 1921.

Proceedings under the Acts were instituted as follows:—

Date of Purchase	Charge	Results	Penalty	Costs
1921			£ s. d.	£ s. d.
Jan. 19th	Selling Milk with 4% of added water, 24% deficient in cream and containing 0·017% (11·9 grains per gallon) Boric Acid	Convicted	3 3 0	2 2 0
Jan. 27th	Selling Milk containing 0·086% (60·2 grains per gallon) of Boric Acid	Convicted	3 3 0	2 2 0
" 27th	Selling Milk containing 0·088% (60·2 grains per gallon) of Boric Acid	Dismissed	—	—
Feb. 1st	Selling Milk with 0·028% (19·6 grains per gallon) of Boric Acid	Convicted	2 2 0	2 2 0
" 7th	Selling Milk containing 44% of added water	Convicted	15 0 0	5 16 0
" 16th	Selling Milk containing 24% of added water and 16% deficient in cream	Convicted	10 10 0	2 2 0
" 16th	Selling Milk containing 16% of added water	Convicted	8 8 0	2 2 0
" 22nd	Selling Milk containing 7% of added water	Convicted	5 5 0	1 1 0
" 24th	Selling Milk containing a deficiency of 19% in cream	Convicted	2 2 0	3 3 0
April 6th	Selling Milk containing 13% of added water	Convicted	3 0 0	2 2 0
" 27th	Selling Milk containing 8% of added water	Convicted	5 5 0	4 4 0
May 4th	Selling Milk containing 18% of added water	Convicted	2 2 0	2 2 0
Sept. 13th	Selling Milk 18% deficient in cream	Convicted	7 0 0	3 3 0
Oct 19th	Selling Milk 13% deficient in cream	Convicted	2 2 0	3 3 0
		TOTAL ...	69 2 0	35 4 0

**Details of Non-Genuine Samples where proceedings
were not instituted.**

No. of Sample	Article	Remarks
71	Milk	Sample 7% deficient in cream. Further sample taken proved genuine.
88	Milk	Sample 7% deficient in cream. A sample taken from farmer supplying this milk, retailer found non genuine, he was proceeded against.
93	Milk	Sample 3% deficient in cream. Further sample taken proved genuine.
200	Corn Flour	Sample contained 100% of rice flour. As the preparation was stated to be such on the packet in which it was sold, no action was taken.
229	Milk	Sample 8% deficient in cream. Further sample taken proved genuine.
249	Milk	Sample 7% deficient in cream. Further sample taken proved genuine.

Preservatives in Milk, Butter, Margarine, etc.

During the year the Analyst reports that four of the milk samples contained preservatives as follows:—

Sample No. 30 contained 0.017 per cent. of Boric Acid.

„	55	„	0.086	„	„
„	56	„	0.088	„	„
„	58	„	0.028	„	„

Proceedings were instituted in each case and results can be seen under heading of Prosecutions.

Of the 30 samples of butter purchased, 13 contained Boric Acid as follows:—0.02 per cent., 0.52 per cent., 0.11 per cent., 0.13 per cent., 0.41 per cent., 0.12 per cent., 0.13 per cent., 0.13 per cent., 0.34 per cent., 0.04 per cent., 0.14 per cent., 0.07 per cent., and 0.08 per cent.

12 samples of Margarine were purchased and contained Boric Acid as follows:—0.31 per cent., 0.36 per cent., 0.35 per cent., 0.23 per cent., 0.33 per cent., 0.32 per cent., 0.32 per cent., 0.32 per cent., 0.28 per cent., 0.22 per cent., 0.21 per cent., and 0.25 per cent.

There were 11 samples of lard taken, these, in conjunction with the Margarine, were tested for the presence of paraffin. None was found.

10 samples of Mincemeat were procured and in three of them Salicylic Acid was present to the extent of 0.28, 0.22 and 0.97 grains per pound.

Registration of Margarine Dealers.

No premises were registered during the year. 25 visits were paid to registered premises.

Fertilizers and Feeding Stuffs Act, 1906.

4 samples of Poultry Spice were obtained during the year. These were certified by the Analyst to be genuine.

Rag Flock Act.

4 samples of Rag Flock have been taken during the year, three of which were reported by the Analyst to be genuine, and one as a “dirty flock.” Proceedings were instituted in the case of the dirty flock, but case was withdrawn in the Court upon evidence being forthcoming to prove that the sample of flock in question was not a “flock” within the meaning of the Act. It was said to be “Wool Flock.”

Canal Boats.

During the year 1,324 Canal Boats have been inspected in this district. On the whole they were found to be clean, well ventilated, and in a good state of repair.

The accommodation provided on these 1,324 canal boats was as follows:—

4,036 persons, being an average of 3.04 per boat. The number of persons in occupation was:—3,646, viz.: males, 1,616;

females, 1,085; children, 945; being 44.3 per cent. males; 29.7 per cent. females; 25.9 per cent. children; or an average of 2.75 persons in occupation per boat; but, if we count two children as one adult, it reduces the average in occupation to 2.39.

Of the 945 children on board, there were 468, or 12.83 per cent. over 5 years, and therefore of school age, 502, or 13.7 per cent. were boys and 443, or 12.1 per cent. were girls.

These canal boats were registered to carry the following number of persons:—

5 boats were registered to carry 6 persons.					
19	”	”	”	5	”
277	”	”	”	4	”
8	”	”	”	$3\frac{1}{2}$	”
942	”	”	”	3	”
2	”	”	”	$2\frac{1}{2}$	”
1	”	”	”	2	”
80 were not registered or void.					

1324

195 have a fore cabin, being 14.72 per cent. of the canal boats inspected.

2 were registered to carry 3 persons.					
3	”	”	2	”	
190	”	”	1	”	

195

In 37 cases the Captains were also owners of their canal boats.

77 pairs of canal boats were worked by one family, and in 6 cases one family worked three canal boats (occasionally with assistance).

There were 12 canal boats inspected which had female captains.
Infringements of Acts and Regulations:—

(a) Registration	...	...	...	1
(b) Notification of change of master	...	...	...	0
(c) Certificates	...	...	...	15
(d) Marking	...	...	...	6
(e) Overcrowding	...	...	...	9
(f) Separation of Sexes	...	...	...	5
(g) Cleanliness	...	...	...	4
(h) Ventilation	...	...	...	0
(i) Painting	...	...	...	4
(j) Provision of water cask	...	...	...	10
(k) Removal of bilge water	...	...	...	3
(l) Notification of infectious disease	...	...	...	0
(m) Admittance of Inspector	...	...	...	0

No legal proceedings were taken under the Canal Boats Acts and Regulations during this period.

Notices were served in 45 cases for 57 contraventions. Of these 40 notices have been returned duly signed, signifying that the said contraventions had been remedied.

There were no cases of infectious disease met with on a canal boat during this period.

There are at present upon the register, according to the revised list:—

- (a) 519 canal boats known to be working;
- (b) 330 canal boats that are either cancelled, broken up, or cannot be traced.

849 Total number on register.

(a) There were no motor propelled canal boats registered by this authority.

(b) Nineteen canal boats were registered during the past year:—

Change of ownership ...	...	...	19
New canal boats ...	...	...	2
			—
Total ...		...	21

INFECTIOUS DISEASES.

The following is a list of the diseases which at present have to be notified to the Medical Officer of Health:—Scarlet Fever, Diphtheria, Membranous Croup, Typhoid Fever (Enteric and Paratyphoid Fever), Puerperal Fever, Cholera, Erysipelas, Smallpox, Typhus Fever, Relapsing Fever, Continued Fever, Plague, Cerebro-Spinal Fever, Acute Poliomyelitis, Pulmonary Tuberculosis, Other forms of Tuberculosis, Ophthalmia Neonatorum, Malaria, Dysentery, Trench Fever, Acute Primary Pneumonia, Acute Influenzal Pneumonia, Acute Encephalitis Lethargica, Acute Polio-Encephalitis, and Chickenpox, for a period of six months ending April 30th, and again from October 10th for a further period of six months.

Table 7.—Cases of Infectious Diseases notified during the year 1921.

Disease	Number of Cases Notified							Total Cases notified in each Locality of the District						Total Cases removed to Hospital	
	At all Ages	At Ages—Years						Burslem	Fenton	Hanley	Longton	Stoke	Tunstall		
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65								65 and upwards
Smallpox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria and Membranous Croup	311	69	145	51	37	2	—	49	32	134	28	57	11	—	272
Erysipelas ...	146	4	16	21	27	57	14	37	17	28	17	25	22	—	6
Scarlet Fever	651	111	442	73	18	2	—	172	59	129	151	79	61	—	595
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	27	1	13	5	5	2	1	4	—	11	9	2	1	—	21
Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	34	—	—	17	16	1	—	11	5	5	11	1	1	—	—
Cerebro Spinal Meningitis	7	2	2	—	—	—	—	1	—	5	1	—	—	—	—
Poliomyelitis ...	1	—	1	—	—	—	—	—	—	—	—	—	1	—	6
Encephalitis Lethargica	9	—	3	1	4	1	—	2	—	1	3	1	2	—	6
Pulmonary Tuberculosis	491	11	65	112	175	115	9	109	70	134	71	72	35	—	—
Other Forms of Tuberculosis...	96	23	27	19	12	—	—	12	10	37	14	12	11	—	—
Ophthalmia Neonatorum	369	—	—	—	—	—	—	108	57	117	48	28	11	—	—
Pneumonia, Primary...	594	42	126	89	124	65	17	112	25	192	79	90	96	—	—
Pneumonia, Broncho	417	98	65	10	20	21	8	129	48	102	26	86	26	—	—
Pneumonia, Influenzal	89	8	6	19	26	9	5	20	17	33	6	5	8	—	—
Malaria ...	8	—	—	—	8	—	—	3	1	3	—	1	—	—	—
Dysentery ...	2	—	—	—	2	—	—	—	—	—	—	2	—	—	—
Trench Fever	1	—	—	—	1	—	—	1	—	—	—	—	—	—	—
*Chickenpox	462	51	242	7	2	—	—	124	58	67	58	101	54	—	1
TOTALS	3715	609	723	1153	424	477	275	894	399	998	522	562	340	907	

*From 1st Jan.—6th June and from 10th Oct.—31st Dec.

Isolation Hospitals— Name and Situation	{	Stoke and Stoke Rural Joint Hospital, Bucknall	...	Total available beds, 264.
		Stanfield Sanatorium, Burslem	...	" " 65.
		North Stafford Joint Smallpox Hospital	...	" " 54.

TABLE 8. Showing the numbers of cases and deaths from Scarlet Fever, Diphtheria and Enteric Fever since 1910.

	SCARLET FEVER		DIPHTHERIA		ENTERIC FEVER	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
1910 ...	2005	66	637	83	122	30
1911 ...	1687	63	819	90	139	26
1912 ...	696	29	514	60	139	27
1913 ...	266	4	634	95	103	23
1914 ...	223	1	528	79	86	18
1915 ...	874	28	932	104	48	12
1916 ...	722	24	865	108	31	6
1917	387	14	622	66	20	4
1918 ...	260	8	508	60	21	5
1919 ...	807	31	466	29	10	3
1920 ...	1060	40	342	21	11	2
1921 ...	651	22	311	20	27	7

Scarlet Fever.

Number of cases notified	...	...	651
Number of deaths	...	...	14
Case fatality per cent.	...	...	2.1
Number of cases removed to hospitals	...	...	595
Percentage of cases removed	...	...	91.3

The attack rate for the County Borough during the year was 2.64 per 1,000 of the population.

Table showing the number of cases in the various districts of the Borough:—

Districts		Burslem		Fenton		Hanley		Longton		Stoke		Tunstall		County Borough	
Year		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1917	...	104	4	46	1	81	1	57	1	43	1	56	6	387	14
1918	...	112	4	36	—	34	1	30	2	33	1	15	—	260	8
1919	...	198	15	148	1	276	10	50	—	104	5	31	—	807	31
1920	...	194	8	190	7	298	13	144	4	156	5	78	3	1060	40
1921	...	172	—	59	1	129	2	151	4	79	4	61	3	651	14

The disease was less prevalent during the year than for the previous two years.

The attack rate per 1,000 of the population for the various districts was as follows:—Burslem, 3.96; Fenton, 2.16; Hanley, 1.80; Longton, 3.91; Stoke, 2.04; Tunstall, 2.14. Shownig that the disease was most prevalent in Burslem and Longton.

The percentage of removals to the Hospital was 91.3, as compared with 86.3 for the previous year.

The mortality rate in the district during 1921 was 0.08. The mortality rate for the disease in England and Wales was 0.03 per 1,000 of the population, and in the 96 great towns 0.04 per 1,000.

All cases are promptly visited on notification, and removal to Hospital urged where there are not means of isolating the patients. Disinfection is carried out promptly and thoroughly. The head teachers of the elementary schools are advised of the occurrence of Scarlet Fever among the scholars, or in the families of the scholars, and such scholars are excluded from school until the expiration of the time advised in the memorandum of the Local Government Board and the Board of Education. Every case is kept under supervision until disinfection is completed. It is understood that all information transmitted from this Department is promptly sent on to the School Medical Officer. Generally, in dealing with infectious disease, there is close co-operation between the School Medical Department and the Health Department.

Leaflets containing instructions for preventing the spread of the disease, and extracts from the Acts of Parliament relating to infectious diseases, are left at each infected house.

The case fatality for the year was 2.1 per cent., compared with 3.7 in 1920.

In no case was the outbreak of the disease attributable to anything other than personal contact.

Diphtheria.

Number of cases notified	...	...	...	311
Number of deaths	...	...	...	20
Case fatality per cent.	...	...	...	6.4
Number of cases removed to hospital	...	...	...	272
Percentage of cases removed	...	...	...	87.4

The attack rate for the Borough was 1.27 per 1,000 of the population.

The disease was less prevalent during the year than for many years previously, and the number of deaths correspondingly few.

Districts	Burslem		Fenton		Hanley		Longton		Stoke		Tunstall		County Borough	
Year	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1917 ..	139	17	86	15	187	17	33	2	124	7	53	8	622	66
1918 ..	178	25	87	9	113	7	17	3	62	4	51	12	508	60
1919 ...	55	2	77	6	182	9	14	1	112	6	26	5	466	29
1920 ...	73	6	35	3	148	7	21	2	56	2	9	1	342	21
1921 ...	49	4	32	2	134	7	28	1	57	5	11	1	311	20

The attack rate per 1,000 of the population for the various districts was as follows:—Burslem, 1.12; Fenton, 1.13; Hanley, 1.91; Longton, 0.61; Stoke, 1.47; Tunstall, 0.38. Showing that the disease was least prevalent at Longton and Tunstall, but was most prevalent in Stoke and Hanley.

The death rate from Diphtheria in the County Borough was 0.07, compared to 0.15 in the 96 great towns, and 0.12 in England and Wales.

Personal contact has again seemed to play the chief part in the spread of the disease.

No schools were closed on account of the prevalence of the disease among the scholars.

All cases are promptly visited on notification, and removal to hospital carried out where isolation is not up to a fair standard, and also in cases of serious illness or where tracheotomy is required. The County Borough provides means for carrying out promptly bacteriological examinations. Arrangements have been made for a gratuitous supply of anti-toxin at any time, day or night, to medical men on demand, and a fee is paid for its use, both for purposes of treatment and prevention. Disinfection is carried out promptly and thoroughly. The head teachers of schools are kept regularly informed of the occurrence of cases among the school children and contacts, and they are dealt with according to the Memorandum of the Local Government Board and the Board of Education. The head teachers are informed in all cases as to the date on which patients and contacts may return to school. Leaflets containing instructions for preventing the spread of the disease, and extracts from the Acts of Parliament relating to infectious diseases, are left with the householder in each case.

Bacteriological examination of swabs from suspected cases is made free of charge to medical men. In 1921, 282 examinations were made, with a positive result in 50 cases; in 1920, 105 examinations were made, with positive results in 20 cases.

During the year 58 patients were injected with anti-toxin at their homes by their medical attendants. The amount of serum used in each case averaged 2,603 units.

39 contacts were injected for preventive purposes, the amount of serum used averaged 730 units in each case.

The cost to the Corporation was £9 4s. od. paid to medical men for injecting serum, and £43 3s. 3d. paid to chemists for the supply of the serum.

Enteric Fever.

Number of cases notified	...	...	...	27
Number of deaths	...	...	...	7
Case fatality per cent.	...	...	...	25.9
Number of cases removed to hospitals	...	...	...	21
Percentage of cases removed	...	...	...	77.7

The attack rate for the Borough was 0.10 per 1,000 of the population.

Districts	Burslem		Fenton		Hanley		Longton		Stoke		Tunstall		County Borough	
Year	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1917 ...	7	2	1	—	4	—	2	2	5	—	1	—	20	4
1918 ...	5	—	2	—	10	3	—	—	1	—	3	2	21	5
1919 ...	—	1	—	1	8	—	—	—	1	1	1	—	10	3
1920 ...	2	1	2	—	7	1	—	—	—	—	—	—	11	2
1921 ...	4	2	—	—	11	4	9	1	2	—	1	—	27	7

Of the cases in Longton, 8 occurred in two houses and were traceable to watercress. The occurrence of cases of Enteric Fever in Hanley is being investigated.

The death rate from Enteric Fever in the 96 great towns during the year 1921 was 0.01 per 1,000. In England and Wales 0.02. In Stoke-on-Trent it was 0.02.

Bacteriological examinations were made by the Corporation Bacteriologist in 8 instances, with one positive result. In 1920, 13 examinations were made, with one positive result.

Erysipelas.

There were 146 cases notified during the year. There were 14 deaths from this disease. Last year 159 cases were notified with 9 deaths. Six cases were removed to the Isolation Hospital.

Enquiries are made into these cases and the sanitary condition of the houses attended to.

Cerebro Spinal Fever.

Seven cases of Cerebro-Spinal Fever were notified during the year, three of whom died.

TABLE OF CASES.

No.	Sex	Age	Occupation (if any)	District	If recovered
1	Male ...	6 years ...	At school...	Hanley ...	Yes
2	Male ...	9 years ...	At school...	Hanley ...	Patient died
3	Female ..	7 months...	Infant ...	Hanley ..	Patient died
4	Female ...	10 months	Infant ...	Hanley ...	Yes
5	Female ...	11 months	Infant ...	Hanley ...	Yes
6	Male ...	21 months	Infant ...	Hanley ...	Yes
7	Female ...	4 years ...	Infant ...	Longton ...	Patient died in Hospital

In all cases full enquiries were made, but the sources of infection could not be traced.

Disinfection was carried out in all cases, the sanitary condition of the houses attended to, and contact children excluded from school for two weeks.

Acute Encephalitis Lethargica and Acute Polio-Encephalitis.

Nine cases of Acute Encephalitis Lethargica were notified during the year, two of whom died.

TABLE OF CASES.

No.	Sex	Age	Occupation (if any)	District	If recovered
1	Male ...	27 years ...	Collier ...	Tunstall ...	Yes
2	Female ...	5½ years ..	At school...	Stoke ...	Yes
3	Female ...	28 years ...	At home ...	Burslem ...	Yes
4	Female ...	16 years ...	At factory	Longton ...	Yes
5	Female ...	38 years ...	At factory	Longton ...	Patient died
6	Male ...	45 years ...	Miner ...	Hanley ...	Yes
7	Male ...	11 years ...	At school...	Burslem ...	Patient died
8	Male ..	7 years ...	At school...	Longton ...	Yes
9	Male ...	15 years ...	At factory	Fenton ...	Yes

Malaria, Dysentery and Trench Fever.

The number of cases of these diseases notified were as follows: Malaria, 8; Dysentery, 2; Trench Fever, 1. All the cases occurred in men who had been abroad serving in the Army, and in no case had the disease developed among the civilian population.

Influenza.

The number of cases notified during the year was:—Influenzal Pneumonia, 89; and Pneumonia and Broncho Pneumonia, 506. The number of deaths was: Influenza, 87, being equal to a rate of 0.35 per 1,000 of population; and Pneumonia and Broncho Pneumonia, 263, being equal to a rate of 1.07 per 1,000 of the population.

A serious outbreak of Influenza occurred in December and continued until the second week in February, 1922. A large number of cases occurred, and 83 cases of Influenzal Pneumonia, Acute Pneumonia and Broncho Pneumonia were notified during the last week in the year. The disease was, on the whole, milder than during the epidemics of 1918 and 1919, and it did not prove necessary to provide hospital accommodation, but some assistance was given in the way of home nursing.

Disinfection.

Disinfection is carried out at one Central Station where there are two Washington-Lyons Steam Disinfectors with a constant supply of steam. There are employed in this work five men with a motor van with two bodies, and a horse van for use when necessary.

The method of disinfection adopted is as follows:—all bedding, clothing, etc. which has been exposed to infection is removed for disinfection at the Station after all cases of infectious disease (including Tuberculosis), excepting Measles. The surfaces of infected rooms are sprayed with a solution of Izal at a strength of 1 in 20, or fumigated by means of formalin lamps.

The total number of houses disinfected during the year was 1,558, and the number of rooms in such houses, 1,885. Some 39 rooms in two schools were sprayed. The number of articles passed through the Disinfector totalled 15,710. 12 Police Cells, 107 Books and 1 Cab were disinfected during the year.

Respiratory Diseases.

During the year 1921 there were 727 deaths from Respiratory Diseases, giving a death rate of 2.54 per 1,000 of the population, as compared with 4.02 for the year 1919.

The distribution of these deaths is shown in the following table:

Name of District	No. of Deaths from Bronchitis	No. of Deaths from Pneumonia	No. of Deaths from Fibroid Phthisis	No. of Deaths from Pleurisy	No. of Deaths from other Respiratory Diseases	TOTAL	Rate per 10000
BURSLEM.. ...	50	48	—	1	1	100	2.30
FENTON	29	17	—	2	1	49	1.79
HANLEY	127	94	2	1	5	229	3.30
LONGTON	109	43	—	1	6	159	4.01
STOKE	63	39	—	7	1	110	2.79
TUNSTALL	52	22	—	2	4	80	2.81
WHOLE BOROUGH ...	430	263	2	14	18	727	2.96

The death rate from Bronchitis in the County Borough was 1.75 per 1,000 of the population. There were 430 deaths from this disease, as against 365 last year. The rate for 1920 was 2.54.

The death rate from Pneumonia was 1.07 per 1,000 of the population. The rate for 1920 was 0.90.

Alcoholism.

Alcoholism caused 17 deaths during 1921, 16 of these being certified as due to Cirrhosis of the Liver. In 1920 there were 13 deaths due to Alcoholism.

Lead Poisoning.

This is an affection which is associated with pottery manufacture. Through careful supervision, and under the Special Rules of the Home Office, lead poisoning has diminished. There was an increase in the number of cases in 1910 and 1911, but the number diminished in 1913, and was considerably lower in 1914, 1915, 1916, 1917 and 1918. The years 1919, 1920 and 1921 show an increase.

According to the Report of the Departmental Committee there were engaged in 1907, as lead workers under the Earthenware and China Rules in North Staffordshire, 5,299 persons (3,371 males and 1,928 females). In 1906 there were 85 cases of lead poisoning; in 1907, 82 cases; in 1908, 91 cases; in 1909, 49 cases; in 1910, 63 cases; in 1911, 78 cases; in 1912, 74 cases; in 1913, 55 cases; in 1914, 23 cases; in 1915, 22 cases; in 1916, 21 cases; in 1917, 16 cases; in 1918, 8 cases; in 1919, 25 cases; in 1920, 32 cases, and in 1921, 34.

Deaths from Lead Poisoning with Occupations:—

Potters' Placers	...	...	...	4
Potters' Dippers	...	...	...	3
Colour Worker	...	...	...	1
Oven Fireman	...	...	...	1
Occupation not stated	...	...	...	2

In 1918 there was one death only attributed to Lead Poisoning. In 1919 there were seven deaths, and in 1920, 15 deaths.

TUBERCULOSIS.

The following table shows the number of cases of Tuberculosis notified, and the number of deaths since 1912:—

		PULMONARY.		NON-PULMONARY.	
		Notified Cases	Deaths	Notified Cases	Deaths
1912	...	730	300	...	120
1913	...	815	304	381	129
1914	...	675	308	201	112
1915	...	686	293	126	94
1916	...	580	326	142	123
1917	...	501	330	100	125
1918	...	606	325	211	108
1919	...	742	283	100	78
1920	...	587	260	151	86
1921	...	491	292	96	74

Phthisis Pulmonalis.

Four hundred and ninety-one cases were notified in accordance with the provisions of the Public Health (Tuberculosis) Regulations.

The cases and deaths were distributed as follows:—

		Number notified	Number of deaths	Death Rate per 1000 of population
Burslem	...	109	68	1.56
Fenton	...	70	25	0.91
Hanley	...	134	83	1.19
Longton	...	71	51	1.32
Stoke	...	72	41	1.03
Tunstall	...	35	24	1.23

The following Table shows the period which elapsed between the Notification of Phthisis and the Death in the 292 cases which died during the year:—

Dead when notified	...	...	...	...	7
Died within 1 week of notification	...	...	...	...	40
Died from 1 week to 1 month of notification	...	...	...	...	37
Died from 1 month to 2 months of notification	...	...	...	...	24
Died from 2 months to 3 months of notification	...	...	...	...	18
Died from 3 months to 4 months of notification	...	...	...	...	12
Died from 4 months to 5 months of notification	...	...	...	...	11
Died from 5 months to 6 months of notification	...	...	...	...	7
Died from 6 months to 12 months of notification	...	...	...	...	40
Over 12 months	...	...	...	...	96

Out of the 292 deaths from Phthisis during the year, 64 had not been notified, a percentage of 21.9. There were 74 deaths from other forms of Tuberculosis, and 25 of these had not been notified, a percentage of 33.7.

There were 292 deaths from Phthisis during the year, giving a death rate of 1.18 per 1,000; in 1920 there were 260 deaths and a death rate of 1.04 per 1,000. In England and Wales, in 1919 the death rate was 1.18 per 1,000.

The average death rate from Phthisis for England and Wales for 1912—1914 was 1.03 per 1,000 of the population; for 1915 it was 1.16 per 1,000; for 1916, 1.18; for 1917, 1.25; 1918, 1.34, 1919, 1.18.

Sixty-eight deaths occurred in persons aged 15 to 25, and 115 in persons between the ages of 25 and 65 years.

Two hundred and sixty-six Bacteriological Examinations were made in 1921, and tubercle bacilli were found in 59 of the specimens submitted.

During the year 763 visits were paid by the Health Visitors to cases of Tuberculosis, and 2,882 by the Tuberculosis Nurses. The number of visits paid by the Tuberculosis Officers was 301.

There were 74 deaths in the year from forms of Tuberculosis other than Phthisis, this being equal to a rate of 0.30 per 1,000 of the population.

The total death rate from all forms of Tuberculosis, including Phthisis, was 1.48 per 1,000. The deaths from Phthisis were equal to 8.03 per cent. of all the deaths in the County Borough, and the total deaths from all forms of Tuberculosis were equal to 10.03 per cent. of all the deaths. For England and Wales as a whole the corresponding figures were in 1919, 7.3 per cent. and 9.2 per cent.

Other Forms of Tuberculosis.

There were 96 cases notified of other forms of Tuberculosis, and 74 deaths, giving a rate of 0.30 per 1,000 of the population. Of these deaths 22 occurred in children under one year of age, and 13 among children between one year and five years.

Table showing the number of cases notified as suffering from other forms of Tuberculosis during 1921.

	Under 1	1—5	5—15	15—25	25—45	45—65	Over 65	Totals
Tabes Mesenterica ...	...	2	2	...	1	...	...	5
Tubercular Meningitis...	7	3	4	...	2	...	...	16
Glands	...	6	10	7	1	...	..	24
Osseous	...	3	5	9	4	...	...	21
Skin	...	...	...	1	1	...	...	2
General	...	...	...	...	...	...	...	..
Other Forms	8	9	6	2	3	...	..	28
Totals	15	23	27	19	12	...	.	96

The Tuberculosis Dispensary was opened in Stoke on the 24th June, 1913; it consists of Waiting, Consulting, and Examination Rooms, with a Laboratory.

The Branch Dispensary at Longton was opened on the 20th August, 1919. Number of attendances during the year 1921 was 1,137.

During the year there were 7,535 attendances at the Stoke Dispensary, making a total of 8,672 for both Stoke and Longton. Number of New Patients dealt with:—

	Males	Females	Total
Adults—Insured	213	88	301
„ Non-Insured	18	32	50
Children	69	88	157
	300	208	508

The foregoing number was from the following districts:—

Stoke	70
Hanley	159
Burslem	122
Tunstall	36
Fenton	46
Longton	75
	508

The number of attendances at the Dispensary has steadily increased from 4,693 in 1913 to 8,672 in 1921.

STANFIELD SANATORIUM consists of three blocks, with accommodation for 65 patients. One block is used for male adults and another for female adults; both of these blocks are provided with sleeping verandahs and three double shelters. The other block of 18 beds, which has no verandah, is used for the treatment of children.

ADMISSION TO STANFIELD SANATORIUM:—

Males	Females	Children	Total
100 ...	65 ...	105 ...	270

CONDITION ON DISCHARGE:—

Improved	Stationary	Worse	Deaths	Total
233 ...	17 ...	16 ...	11 ...	277

Sixteen selected cases were sent to other Sanatoria during the year, either by the Insurance Committee or the County Borough. These were all discharged soldiers.

CHESHIRE JOINT SCHEME.

The County Borough has joined with the County of Chester and County Boroughs of Cheshire in a formation of a Joint Board for the erection of a Sanatorium. The Sanatorium will consist of 240 beds, the number to be allocated to the County Borough being 48.

PROVISION OF SLEEPING SHELTERS FOR CONSUMPTION.

Sleeping Shelters are provided by the Corporation for the use of consumptive patients at their own homes if the surroundings are suitable.

AFTER-CARE.

A Voluntary After-Care Committee, consisting of members from the Insurance Committee, the Corporation, the Board of Guardians, and other organisations, is doing good work in looking after the needs of those requiring assistance. Milk and clothing have been supplied to many cases, and several persons referred to other bodies for help.

SURGICAL TUBERCULOSIS.

The Corporation have arranged with the North Stafford Cripples' Aid Society for the treatment of cases of Surgical Tuberculosis at their Institution in the Borough.

The Medical Officer of the Institution is the Surgical Tuberculosis Officer of the Corporation. During the year an average of 7.6 patients were in daily residence at the Institution at Hartshill.

Venereal Diseases.

A clinic was established at the North Staffordshire Infirmary, and work was commenced there on November 1st, 1918. The clinics are held four times weekly, twice for men and twice for women. The total cost to the Borough was £1,493 during the year 1921, 75 per cent. of which will be refunded by the Ministry of Health. Two Medical men are in attendance at each clinic. The hours of the Clinics are:—

For men:—Monday, 4 to 6 p.m.

Friday, 5 to 7 p.m.

For women:—Wednesday, 5 to 7 p.m.

Saturday, 12 noon to 2 p.m.

For the purposes of pathological work, arrangements have been made with Professor Dean, of the Manchester University.

The following is the return as to the work done at the clinics during the year 1921:—

(1) Total number of persons dealt with during the year at, or in connection with the Out-patient clinic and suffering from:—

	Number of persons who were under treatment or observation on Jan. 1st, 1921	Number of persons dealt with during the year for the first time	TOTAL
(a) Syphilis	1181	309	1490
(b) Soft Chancre	16	5	21
(c) Gonorrhœa	318	200	518
(d) Conditions other than Venereal	108	78	186
TOTAL .	1623	592	2215

(2) Total attendances of all patients during the year at the Out-patient clinic: County Borough, 4,550; Staffs. County, 2,063; and outside the district, other than the County, 69.

(3) Aggregate number of "In-patient days" of treatment during the year: County Borough, 298; Staffs. County, 40.

Ten medical men in the Borough are registered for the free supply of Salvarsan and its substitutes. These drugs are supplied on application by the medical practitioner to the Senior Medical Officer of the clinic at the North Staffs. Infirmary.

Nine medical men have been supplied with Salvarsan substitutes. The number of doses of Novarsenobillon being 575, the doses varying in strength from .15 grammes to .9 grammes. 62 doses of Neokharsivan were supplied, varying from .45 grammes to .9 grammes in strength.

No action has been taken in the district under the Venereal Diseases Act, 1917.

Statement of Vaccination for the year ending June 30th, 1921.
(Furnished by the Vaccination Officers.)

District	Births	Successfully Vaccinated	Insusceptible	Had Smallpox	Died Unvaccinated	Postponed by Medical Authority	Certs. of Exemption (conscientious objection)	Removals Certified	Removals not found and not accounted for	Not dealt with for various reasons
BURSLEM ...	1319	388	...	...	93	..	783	15	...	40
FENTON ...	741	258	...	...	54	18	319	1	12	79
HANLEY ...	2006	710	2	..	187	55	878	13	46	115
LONGTON ...	1119	599	1	...	85	14	390	8	8	14
STOKE ...	1021	359	...	...	60	4	561	12	14	11
TUNSTALL ...	943	295	...	...	70	...	530	20	...	28
COUNTY BOROUGH	7149	2609	3	...	549	91	3461	69	80	287

No revaccinations have been performed by the Medical Officer of Health under the Public Health (Small Pox Prevention) Regulations, 1917.

MATERNITY AND CHILD WELFARE.

Midwives' Acts, 1902 and 1918.

The following is a summary of the work carried out under the Midwives' Acts:—

Eighty-six midwives notified their intention to practice in the County Borough of Stoke-on-Trent during the year 1921; sixteen of these lived outside the Borough, and most of their work is done in the surrounding districts; thirty-one of the midwives practising in the Borough are trained, and possess the certificate of the Central Midwives' Board.

During the year one midwife died; two ceased practice, one left the district; two had their names removed from the Roll of the Central Midwives' Board, and five additional midwives notified their intention to practice.

Of the Midwives living in the district 25 per cent. are unable to keep records of the pulse and temperature of the patients during the lying-in period; 4 per cent. keep records of temperature only.

The Public Health Authority does not subsidise any midwives in the area.

In addition to 727 routine inspections, the following 151 special visits to midwives have been made:—

Enquiries into Still Births	...	...	...	21
Late notification of Births	...	...	...	20
Puerperal Fever	...	...	...	39
Ophthalmia	...	...	...	10
Special visits in connection with Medical Aid				
Forms, Infant Deaths, etc.	...	...	...	57
Failure to Breast Feed	...	...	...	4
				151

In connection with the Stoke-on-Trent Midwives' Association, four Lectures were given to the midwives of the district.

The subjects were as follows:—

1. Ophthalmia Neonatorum.
2. Puerperal Fever.
3. The History of Midwifery.
4. Ante-Partum Hæmorrhage.

During 1921 there have been received from the midwives:—

- 762 Records for calling in Medical Aid;
- 291 Ophthalmia Notifications;
- 19 Notifications of death of new-born children;
- 4 Notifications of death of the mother;
- 217 Still-births on special forms;
- 37 Notifications *re* failure to breast feed.

The 762 records of calling for Medical Aid were divided as follows:—

- 419 for abnormality or complication during labour;
- 70 for abnormality or complication during lying-in period;
- 273 for abnormality or complication in the case of the child.

The following table shows the reasons for which a Doctor has been called in by a Midwife during the year 1921:—

Asphyxia	...	...	...	9
Contracted Pelvis	...	...	...	14
Ruptured Perineum	...	...	...	61
Adherent and Retained Placenta	...	...	...	35
Abnormal Presentation	...	...	...	40
Tedious Labour	...	...	...	173
Convulsions	...	...	...	10
Prematurity	...	...	...	53
Malformations	...	...	...	26
Still-birth	...	...	...	6
Ophthalmia	...	...	...	120
Ante partum hæmorrhage	...	...	...	33
Post partum	...	...	...	30
Eclampsia	...	...	...	5
Debility	...	...	...	38
Abortion	...	...	...	8
Neuralgia	...	...	...	3
Placenta prævia	...	...	...	8
Varicose Veins	...	...	...	4
Rash	...	...	...	11
Bronchitis	...	...	...	12
Primipara	...	...	...	2
Nervous Exhaustion	...	...	...	4
Jaundice	...	...	...	4
Excessive Vomiting	...	...	...	2
Uterine Inertia	...	...	...	13
Discharging Ears	...	...	...	2
Increase of Pulse and Temperature	...	...	...	16
Pleurisy	...	...	...	1
Hæmaturia	...	...	...	1
Oedema of Cervix	...	...	...	1
Diarrhœa	...	...	...	1
Headache	...	...	...	1
Prolapse of Cord	...	...	...	4
Vaginal Discharge	...	...	...	1
Spina Bifida	...	...	...	1
Phthisis	...	...	...	1
Phlebitis	...	...	...	2
Circumcision	...	...	...	1
Heart Failure	...	...	...	4
Retained Blood Clot	...	...	...	1

762

During the year one midwife reported having laid out a dead body.

One midwife was reported to the Central Midwives' Board for failing to notify a case of Ophthalmia Neonatorum.

The Local Supervising Authority were asked to report again at the end of three and six months respectively.

Under the Midwives' Act, 1918, claims were made by Doctors for the payment of fees in 136 cases out of 762 instances in which medical aid was called in. The Local Supervising Authority has recovered the whole of the fees in 2 cases; in 98 cases a portion or the whole of the fee is being collected in instalments by the aid of the Health Visitors, and in 35 cases fees have been remitted, 1 case was referred to the Borough Treasurer for collection. The 136 claims amounted to £243 19s. od.

The total number of deaths of infants under the age of one year was 959, being equal to an infantile mortality rate of 134 per 1,000 births. In 1920 it was 98; in 1919 it was 111; in 1918 it was 111; and in 1917 it was 116.

Previous to 1917 Stoke-on-Trent was amongst the three or four towns with the highest infantile mortality. In 1918 it was 26th from the top; in 1919, 16th; in 1920, 25th. In 1921 the rate was the highest amongst the 96 large towns.

During the ten years 1911-1920, the infantile mortality rate for the County Borough averaged 137. During 1921, 1920, and 1919 the rates for the six districts were:—

		1921	1920	1919
Burslem	...	161	106	130
Fenton	...	99	116	116
Hanley	...	153	94	105
Longton	...	116	103	128
Stoke	...	115	65	71
Tunstall	...	134	106	112

Of the 959 infants who died in the County Borough before reaching the age of 12 months:—

200, or 20.8 per cent., died in the first week;
 48, or 4.9 per cent., died in the second week;
 43, or 4.4 per cent., died in the third week, and
 46, or 4.7 per cent., died in the fourth week.

The number of deaths in the first month was 337, or 35.0 per cent. of the total number of deaths.

22.2 per cent. of the infants died between the ages of one and three months; 18.9 per cent. between the ages of three and six months; 14.6 per cent. between the ages of six and nine months; and 9.2 per cent. between the ages of nine and twelve months.

This year 35.0 per cent. of the infant deaths occurred in children under one month old, compared to 44.2 per cent. in 1920.

In the following list the relation of certain diseases to the infantile mortality of the district is shown. Enteritis and Diarrhœa accounted for 282 deaths; Premature Birth, 163; Convulsions, 47; Bronchitis, 68; Tuberculosis Diseases, 23; Pneumonia, 64; Atrophy and Debility, 125; Congenital defects, 64.

Five deaths were attributed to overlying, as against 4 last year.

TABLE 9. Infantile Mortality occurring in the Borough and Six Districts, 1921.

Causes of Death	Under 1 week	1 to 2 weeks	2 to 3 weeks	3 to 4 weeks	Total under 4 weeks	4 weeks and under 3 months	3 months and under 6 months	6 months and under 9 months	9 months and under 12 months	Burslem	Fenton	Hanley	Longton	Stoke	Tunstall	Total deaths under 1 year
All causes { Certified Uncertified	190 10	48 ...	43 ...	46 ...	327 10	210 3	181 1	138 1	86 2	212 3	73 1	306 5	129 3	106 3	116 2	942 17
Smallpox	...	...	...	...	.	...	...	...	...	...	...	...	.	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	1	1	...	...	...	...	...	...	...	1	...	...	1
Whooping Cough	...	...	...	...	...	2	...	4	1	1	...	3	2	3	...	9
Diphtheria and Croup	...	...	...	...	...	...	...	...	2	...	...	1	...	1	...	2
Erysipelas	...	...	1	...	1	...	1	...	...	1	...	...	...	1	1	3
Tuberculosis Meningitis	...	...	...	...	...	2	3	1	4	1	...	5	...	1	1	8
Abdominal Tuberculosis	...	...	...	...	...	...	...	2	2	1	...	3	2	1	1	6
Other Tuberculosis Diseases	...	...	...	...	...	1	...	5	3	...	1	6	1	...	1	9
Meningitis (<i>not Tuberculosis</i>)	...	...	...	...	...	1	3	3	1	1	1	5	...	1	...	8
Convulsions	5	4	1	2	12	12	13	8	2	5	3	7	9	7	16	47
Laryngitis	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1
Bronchitis	...	4	1	1	6	16	18	15	13	5	6	17	22	8	10	68
Pneumonia (all forms)	...	...	1	1	2	9	12	19	22	14	5	20	8	10	7	64
Diarrhoea	1	3	2	3	9	32	27	22	6	31	3	26	9	10	17	96
Enteritis	...	2	3	7	12	62	61	34	17	66	13	66	11	16	14	186
Gastritis	...	...	2	1	3	6	5	2	...	1	3	10	1	1	...	16
Syphilis	...	...	1	3	4	5	6	...	...	4	...	3	3	3	2	15
Rickets	...	...	...	...	...	...	1	...	1	1	...	1	...	...	...	2
Suffocation (overlying)	...	...	2	1	3	...	2	...	...	...	...	1	1	...	2	5
Injury at Birth	3	1	...	1	5	...	...	...	...	...	...	1	...	2	2	5
Atelectasis	2	...	1	...	3	...	...	...	...	...	...	2	...	1	...	3
Congenital Malformations	29	9	8	5	51	5	1	4	...	15	3	21	3	7	12	61
Premature Birth	124	14	9	9	156	6	1	...	...	34	21	58	16	20	14	163
Atrophy, Debility and Marasmus	31	9	8	9	57	41	15	10	2	23	14	35	34	9	10	125
Other causes	5	2	3	2	12	13	11	9	11	10	1	20	9	8	8	56
TOTALS	200	48	43	46	337	213	182	139	88	215	74	311	132	109	118	959

Net Births in the year:—Legitimate, 6794; Illegitimate, 338.

Net Deaths in the year:—Legitimate, 911; Illegitimate, 48.

Deaths under one year per 1,000 Births in the Borough.

Year	Total Births	From all causes	From Diarrhoea	From all causes excluding Diarrhoea	From Respiratory Disease	From Debility, Congenital Defects and Premature Births	From Measles	From Whooping Cough
1917	4991	116	5·8	110·2	27·0	48·6	1·2	6·0
1918	5219	111	6·9	104·1	26·0	41·9	4·2	1·5
1919	5635	111	4·7	106·3	27·1	46·4	0·1	5·6
1920	7712	98	10·1	87·9	17·1	48·7	1·9	0·6
1921	7132	134	39·8	94·2	18·8	49·5	0·0	1·2

Average rate for the ten years (1912-21) ... 128

Highest rate for the ten years (1913) ... 169

Lowest rate for the ten years (1920) ... 98

The infantile mortality rate in Stoke-on-Trent for the first quarter was 144.

„ „ „ second quarter was 94.

„ „ „ third quarter was 161.

„ „ „ fourth quarter was 141.

The infantile mortality rate in the 96 great towns in 1910 was 115; in 1911 it was 140; in 1912 it was 101; in 1913 it was 117; in 1914 it was 114; in 1915 it was 117; in 1916 it was 99; in 1917 it was 104; in 1918 it was 106; in 1919 it was 93; in 1920 it was 85; and in 1921 it was 87.

The rate for England and Wales during 1921 was 83.

Notification of Births Act.

Of the 7480 births notified in the County Borough of Stoke-on-Trent during 1921, 5732 were attended by midwives, or 76.6 per cent.

Births notified (including 377 Still-births):—

		Total	Doctors in attendance	Midwives in attendance	Public Institutions
Tunstall		933	152	781	—
Burslem		1398	466	931	1
Hanley		2126	349	1774	3
Stoke		1045	164	834	47
Fenton		778	276	499	3
Longton		1200	287	913	...
Stoke-on-Trent	...	7480	1694	5732	54

MATERNITY AND CHILD WELFARE.

Annual Report, 1921.

Of the total births, 338, *i.e.*, 4.7 per cent. were illegitimate.

INFANTILE MORTALITY RATES AMONGST ILLEGITIMATE AND LEGITIMATE CHILDREN IN THE COUNTY BOROUGH OF STOKE-ON-TRENT.

		Illegitimate		Legitimate		Whole
1911	...	306	...	197	...	203
1912	...	215	...	123	...	128
1913	...	232	...	166	...	169
1914	...	283	...	138	...	144
1915	...	167	...	146	...	147
1916	...	152	...	125	...	126
1917	...	144	...	114	...	116
1918	...	144	...	109	...	111
1919	...	151	...	109	...	111
1920	...	118	...	97	...	98
1921	...	145	...	134	...	134

All the illegitimate children have been visited monthly, and a total of 2,271 home visits have been paid to them by the Health Visitors.

There are six Infant Welfare Centres in the County Borough directly under the Council, and two Centres under Voluntary Committees. These two latter Centres which are at Bath Street, Hanley, and Etruria, work in conjunction with the Corporation Centres, and are assisted by the Corporation.

The number of children on the registers at the Centres at the end of the year was as follows:—

		Total		New Cases 1921
Tunstall	...	649	...	386
Burslem	...	1339	...	812
Shelton	...	583	...	370
Etruria	...	396	...	214
Hanley	...	748	...	489
Fenton	...	340	...	246
Stoke	...	578	...	406
Longton	...	1172	...	788
		5805		3711

Average number of attendances at each Infant Consultation:—

Tunstall	...	...	...	60 to 80
Burslem	...	...	...	150 to 180
Shelton	...	...	...	60 to 70
Etruria	...	...	...	40 to 50
Hanley	...	...	...	60 to 70
Stoke	...	...	...	50 to 60
Fenton	...	...	...	35 to 45
Longton	...	...	...	140 to 160

At Burslem and Longton the Centres are open for the whole of one day each week and the Stoke and Fenton Centres are open for one morning each week. The Centre at Shelton is now open two afternoons each week, the consultations being held one afternoon and the additional afternoon being used for baby weighing and lectures.

The total number of attendances at the Infant Welfare Centres was as follows:—

Attendances	...	...	...	36,325
Consultations	...	...	...	30,448

During the year the names of 3,711 new babies have been entered on the registers of the Welcomes.

3,311 were under one year.

400 over one year of age.

AGES OF CHILDREN AT DATE OF ENTRY TO WELCOMES.

Under 1 mth.	1-2 mths.	2-3 mths.	3-4 mths.	4-6 mths.
330	1243	598	400	330
	6-9 mths.	9-12 mths.	12 mths.-2 yrs.	
	231	179	276	
	2-3 years.	3-4 years.	4-5 years.	
	62	40	22	

A Classification of infants which was commenced in 1920 has been continued during the year. The standard adopted was as follows:—

- Class 1. Healthy infants who are free from any physical defect.
- Class 2. Healthy infants who are suffering from defects not likely to interfere with life.
- Class 3. Infants who are poorly nourished and whose vitality is below the average but who are not suffering from any serious disability.
- Class 4. Infants suffering from Marasmus, Rickets, and serious constitutional diseases or defects.

CLASSIFICATION OF INFANTS UNDER ONE YEAR.

				Per centage.
Class 1.	...	1107	...	40.0
Class 2.	...	839	...	30.3
Class 3.	...	656	...	23.7
Class 4.	...	167	...	6.0

CLASSIFICATION OF INFANTS OVER ONE YEAR.

				Per centage.
Class 1.	...	20	...	7.6
Class 2.	...	37	...	14.2
Class 3.	...	128	...	49.1
Class 4.	...	76	...	29.1

TABLE SHOWING AGE AT DATE OF ENTRY OF CLASS 3 CHILDREN.

Under 1 mth.	1-2 mths.	2-3 mths.	3-4 mths.
45	172	108	70
4-6 mths.	6-9 mths.	9-12 mths.	12 mths.-2 yrs.
83	58	55	90

GENERAL CONDITION OF THE CHILDREN.

There has been a great improvement in the cleanliness of the children.

During the latter half of the year there was a noticable falling off in the nutrition and general condition of many of the children, especially the older ones attending the Centres. A considerable quantity of Dried Milk has been given away to many of the necessitous cases during the year. For the year ending March 31st, 1922, £3,316 worth of milk was used, £2,394 worth was sold, and the rest given free.

LADIES' VOLUNTARY COMMITTEES.

The Ladies' Voluntary Committees at Burslem and Longton have again given their kind assistance during the year, and have done much valuable work in assisting with the clothing and with the distribution of Dried Milk and Virol.

LECTURES.

Special attention has been given to lectures and talks on mothercraft at the various Centres, and during the latter part of the year the following syllabus was put into use:—

1. Washing the Baby.
The Daily Bath. Care of the Mouth, Eyes, Buttocks.
2. Feeding the Baby.
The advantage of breast feeding.
3. The Bottle-fed Baby.
The Food. The best bottle and the way to clean it.
4. The Baby's First Clothes.
The best and easiest way to dress a Baby.
5. The Baby's Sleep.
The need for separate cots.
6. The Baby's need for fresh air and warmth.
7. The Baby's Diet when Weaning.
The time to wean.
8. The Baby's Shortening Clothes.
9. Infant Ailments.
Simple home remedies and precautions.
10. Milk and the way to take care of it.
11. The Expectant Mother.
Her needs. The needs of the child.
12. Preparation for Confinement.
When the mother should consult a Doctor, etc.

LECTURES IN COOKERY AND NEEDLEWORK.

Lectures in cookery and needlework have been given at all the Centres by the Lecturers provided by the Education Committee.

ANTE-NATAL CLINICS.

During the year 301 expectant mothers attended the Ante-Natal Clinics held at Richmond Lodge, Shelton, the Wesleyan Schools, Swan Bank, Burslem, and St. John's Schools, Longton.

The Clinics at Shelton are held on Tuesday morning and Wednesday evenings; at Burslem on Thursday morning; and at Longton on Friday evening.

Of those attending there were:—

Primipara	...	...	62
Multipara	...	...	239
Total attendances	...	...	1432

A large number of the cases have been sent by the midwives of the district, and it is hoped that there will be still yet greater co-operation in this direction.

A great many of the women were suffering from some ailment, and an unduly large number were found to be anaemic and badly nourished: a result probably of the coal strike and the long period of unemployment during the year.

On examination five women were found to be not pregnant—three cases were referred to the Tuberculosis Dispensary, eight were referred to the North Staffordshire Infirmary and other Institutions, and seventeen women to their own doctors.

The need for a Maternity Hospital in the district is an urgent one.

The following is a list of the conditions found on examination at the first attendance at the clinic:—

Anæmia and Malnutrition	...	...	97
Dyspepsia and excessive vomiting	...	...	34
Constipation	...	...	31
Varicose Veins	...	...	29
Displacements of Uterus	...	...	4
Hernia	...	...	2
Goitre	...	...	2
Contracted Pelvis	...	...	1
Cardiac Disease	...	...	3
Albuminuria	...	...	6
Abnormal Breast conditions	...	...	9
Bronchial Catarrh	...	...	13
Varicose Ulcer of Leg	...	...	1
Epilepsy	...	...	1
Facial Paralysis	...	...	1
Defects of Vision	...	...	2

1,951 free dinners were provided for expectant mothers and 56 were allowed free milk.

Eighteen of the mothers had had 187 pregnancies between them with a history of 73 deaths and still-births.

The work of the Ante-Natal Clinics, although as yet very limited in extent, has had encouraging results.

The babies of mothers who have attended the Ante-Natal Clinics, are found to be exceptionally fine ones. Their weights are about 1 lb. more than that of the average infant at birth.

It is interesting to record the two following cases of mothers who had suffered from lead poisoning—one who had had lead poisoning nine years ago was allowed free dinners during pregnancy and had a healthy infant weighing 10½ lbs. at birth.

In the second case the mother suffered from lead poisoning 7 years previously. She was allowed free milk during pregnancy; the infant weighed 9½ lbs. at birth and was apparently healthy.

Simple lectures on the hygiene of pregnancy have been given at all the Ante-Natal Clinics, and whilst the mothers have taken a great deal of interest in what has been told them, one has too often heard the remark “how have we the means to do any of the things you tell us?” During the year it has been increasingly difficult for the mothers to have nourishing food, sufficient clothing, or a good

supply of fresh air. The following four cases are only too typical of many who attended the Clinics:—

1. Husband notified Phthisis and has done no work for three years. Woman badly nourished. Eighth pregnancy.
2. Husband disabled soldier, cannot wash or dress himself. Woman badly nourished. Fifth pregnancy.
3. Husband has done no work for eight months. Not worked since birth of last child.
4. Husband not worked for twelve months. Woman badly nourished. Eighth pregnancy.

It should be borne in mind that there are two great factors influencing the life and vitality of the young infant. The poorly nourished woman who lives in an overcrowded house without ventilation, the woman who in only too many cases is fatigued and worn out by too frequently recurring pregnancies is not likely to be able to hand down an inheritance of health and vigor to her offspring.

The environment of the infant is also only too often highly unsatisfactory. It is impossible for infants to thrive in an atmosphere such as is found in the houses at the present time. The one room in which the infant spends all the day-time hours is very often overcrowded, all the cooking operations which go on, are carried out in this room, and in addition, in bad weather, anyway, the clothes, if washed at all, are dried in this room also.

Puerperal Fever.

There were 34 cases of Puerperal Fever notified during 1921, 12 of which proved fatal.

		Doctor in attendance.	Midwife in attendance.	Doctor and Midwife in attendance.	Total.
Burslem	...	4	5	3	12
Hanley	...	—	4	1	5
Longton	...	1	8	2	11
Stoke	...	—	—	—	—
Tunstall	...	1	—	—	1
Fenton	...	—	3	2	5
		—	—	—	—
		6	20	8	34

There is no hospital accommodation for the treatment of Puerperal Fever other than the Guardians' Institutions. The question of making such provision has been under consideration. The need for such an institution is urgent.

Deaths assigned to Pregnancy or Child Birth.

		Puerperal Fever	Other Diseases	Total	Rate per 1,000 Births
1921	...	12	21	33	4.6

The rate per 1,000 births in England and Wales was, in 1920 4.37.

All cases of Puerperal Fever are very carefully enquired into, and precautions taken in the way of disinfecting the midwife and controlling her practice in order to prevent the spread of the disease.

Ophthalmia Neonatorum.

The total number of cases notified by medical men and midwives in 1921 was 369, as compared with 388 in 1920. In 143 instances the diagnosis was not confirmed by a medical man, though notifications were received from midwives.

Ophthalmia Neonatorum has been compulsorily notifiable throughout the whole area since 1911, 226 notifications were received during 1921 from medical men either as first notifications or confirming midwives' notifications. The total number of notifications received from midwives was 291. The 369 cases notified were distributed as follows:—

Burslem	...	...	...	110 cases
Fenton	...	...	...	56 cases
Hanley	...	...	...	116 cases
Longton	...	...	...	48 cases
Stoke	...	...	...	28 cases
Tunstall	...	...	...	12 cases
Number of cases notified	...	...	...	369
Number of births registered	...	...	...	7,103
Number of cases per 1,000 births...	...	...	...	51.9
In 1920 the number of cases per 1,000 births was	...	...	...	50.3
In 1919	„	„	„	57.6
In 1918	„	„	„	36.6
In 1917	„	„	„	45.6
In 1916	„	„	„	38.2
In 1915	„	„	„	38.0
In 1914	„	„	„	40.7
In 1913	„	„	„	20.2
In 1912	„	„	„	32.9

The vast majority occurred between the ages of one and eight days.

In 91 of the cases the birth was attended by a doctor.

In 278 cases the birth was attended by a midwife.

Nurses were supplied by the Corporation in 188 cases.

The cost of nursing was £785 10s. 7d.

Cases of Ophthalmia Neonatorum			Vision unimpaired	Vision impaired	Total Blindness	Deaths
Notified	Treated					
	At home	In hospital				
369	186	5	361	2	0	7

One case where the vision was impaired died subsequently.

No hospital accommodation exists for the treatment of Ophthalmia Neonatorum. This is a very urgent matter, as at times it has been found very difficult indeed to have the cases properly nursed and attended to in the homes. This matter has been before the Council for years.

Day and night nurses are supplied in all cases where necessary, and arrangements also made for specialists, who consult with the medical attendant free of charge.

Measles.

There was only 1 death, compared to 71 in 1920, and 20 in 1919.

The death rate from Measles in 1921 was 0.00 per 1,000, compared to 0.08 for the 96 great towns, and 0.06 for England and Wales.

The ages of death were as follows:—

Under 1	1—2	2—5	5—15	15—25
0	0	1	0	0

Measles is not now compulsorily notifiable.

Whooping Cough.

There were 22 deaths from Whooping Cough during the year, compared with 8 in 1920, 105 in 1919, and 36 in 1918.

The deaths occurred at the following ages:—

Under 1	1—2	2—5	5—15
9	7	5	1

Leaflets are distributed through the schools.

Acute Anterior Poliomyelitis.

During the year one case of Acute Anterior Poliomyelitis was notified. This was a case of a girl aged 8 from Goldenhill. She attended the North Staffordshire Cripples' Aid Institution for treatment.

Epidemic Diarrhoea.

During the year 282 deaths occurred from Epidemic Diarrhoea under one year of age; 30 from 1-2 years of age; 6 from 2-5 years of age; and 21 over 5 years of age.

The death rate under 2 years of age per 1,000 births was 43.5, as compared with 19.3 for the 96 large towns and 15.5 for England and Wales.

Temporary hospital accommodation was arranged at the Stoke-upon-Trent Guardians' Institution and 39 infants were treated there, of these 19 died.

In addition to this, extra nurses were provided for work in the homes of the people.

It will be recalled that the Summer and Autumn was very hot and dry, and the epidemics starting in July continued throughout

August and September, and into October. As a result of the large number of deaths, the Infantile Mortality rate for the Borough was very considerably raised, the County Borough having the highest Infantile Mortality amongst large towns for the year. In addition to the outbreak of the Summer Diarrhœa, there was the unusual amount of Infective Enteritis during the Winter of 1920-1921.

The following enquiry was made in 188 cases of death from diarrhœa.

Age of infant:—

Under 1 month	...	12
1-3 months	...	60
3-6 months	...	52
6-9 months	...	33
9-12 months	...	12
Over 1 year	...	19
Total	...	188

HOUSING. Of the 188 cases, 132 occurred in houses of 4 rooms and under. Sanitary defects were reported in 44 cases.

FEEDING in 178 cases at time of onset of illness.

Breast	...	...	...	31
Breast and additional food	...	...	...	19
Dried Milk preparations	...	...	...	22
Cow's Milk	...	...	...	51
Condensed Milks	...	...	...	38
Mixed Diet	...	...	...	13
Patent foods	...	...	...	4
				178

From July 1st to October 31st, emergency treatment was given to 788 children attending the Infant Welfare Centres. This early treatment given at the very commencement of the illness had most excellent results.

Table shewing the Feeding of 585 Infants attending the Centres, from September 22nd to 30th, with the number of Diarrhœa Cases occurring in those Infants.

Feeding	Number of Infants	Number of Diarrhœa Cases
Breast	227	17
Breast and additional Food ..	60	5
Cow's Milk	98	8
Glaxo	119	17
Mixed Diet	181	6
TOTAL	585	53

Isolation Hospitals.

There are now two Isolation Hospitals for the treatment of cases of Infectious Diseases occurring in the Borough, viz.:—The Bucknall Isolation Hospital and the Bagnall Small-Pox Hospital.

During the year 1921, the following patients from the County Borough were treated in the wards of the Bucknall Hospital:—

Scarlet Fever	...	...	...	595
Diphtheria	...	...	...	272
Enteric Fever	...	...	...	21
Cerebro Spinal Meningitis	...	...	...	6
Erysipelas	...	...	...	6
Encephalitis Lethargica	...	...	...	6

Bagnall Hospital is administered by the North Staffordshire Joint Small-Pox Hospital Board, and was built in 1903-4, to accommodate 54 patients. This Hospital at the present time serves the whole of the County of Staffordshire.

Ambulance Arrangements.

For the removal of Infectious Disease cases ambulance accommodation is provided at the Infectious Diseases Hospital.

For the removal of Non-Infectious and Accident cases two motor ambulances are employed by the Corporation. At least one large private firm provides a private motor ambulance to cope with accidents, etc., at their collieries and steel works.

Nursing Arrangements in the Borough.

The following Voluntary Associations provide and pay the Nurses as set out:—

- The Tunstall Nursing Institution, 1 Nurse.
- The Burslem District Nursing Association, 2 Nurses.
- The Hanley Nursing Association, 2 Nurses.
- The Stoke Parochial Nursing Association, 2 Nurses.
- The Fenton Nursing Institution, 1 Nurse.
- Longton District Nursing Association, 2 Nurses.

In addition to the above the Council has supplemented the nursing during the year in connection with outbreaks of Influenza and Diarrhœa.

Adoptive Acts in force in the Borough.

Infectious Diseases Prevention Act, 1890.

The Public Health Acts Amendment Act, 1890.

The Housing of the Working Classes Act, 1890. (Part 3).

Parts of the Public Health Acts Amendment Act, 1907, as follows:—

- Part 2.
- Part 3.
- Part 4.
- Part 5.
- Part 6.
- Part 7.—Sections 79, 80, 81, 85, 86.
- Part 8.
- Part 9.
- Part 10.

Sanitary Administration.

The following table shows the number of defects found in connection with the sanitary accommodation of Factories:—

SANITARY ACCOMMODATION		1920			1921		
		Defects found	Defects remedied	Out- standing at end of year	Defects found	Defects remedied	Out- standing at end of year
SANITARY CONVENIENCES	Insufficient	42	30	12	31	43	...
	Unsuitable	5	4	1	...	1	...
	Defective	4	4	..	8	8	...
	Not separate for sexes	3	3	...	4	4	...
	Badly lighted	2	2	...	1	1	...
	Badly ventilated	1	1	.	1	1	...
	Without proper fasten- ers on doors	6	6	...	1	1	...
	Dirty condition	33	33	...	34	34	...
	Foul or defective urinals	6	6	...	...	...	...
	Other nuisances	21	20	1	6	7	...
	Fittings... ..	16	16	...	1	1	...
Total ...		139	125	14	87	101	...

Workshops.

During the year 2,512 inspections have been made of Workshops and Bakehouses.

Sanitary Defects found in Workshops.

Defects		1920			1921		
		Defects found	Defects remedied	Defects Out- standing at end of year	Defects found	Defects remedied	Defects Out- standing at end of year
Want of Cleanliness ...		222	217	14	215	217	12
Want of Ventilation ...		8	8	1	5	6	...
Overcrowding		3	3	...	1	1	...
Drainage of Floors		..	...	...	...	...	...
Other Nuisances		29	28	5	22	26	1
SANITARY CONVENIENCES :							
Insufficient		9	9	...	12	12	...
Unsuitable		5	5	...	3	3	...
Defective		49	48	2	41	42	1
Not separate for sexes...		1	1	...	9	9	...
Badly lighted		1	1	..	1	1	...
Badly ventilated		7	7	...	3	3	...
No fasteners on doors of Female W.C's. ...		4	4	...	1	1	...
Dirty condition		36	34	4	24	25	3
Fittings... ..		26	24	2	48	49	1
Intervening spaces provided		1	1	...	1	1	...
TOTAL ...		401	390	28	386	396	18

Bakehouses.

There are now on the register 90 Bakehouses, as compared with 92 in the previous year. During the year 622 visits were paid, as compared with 541 in 1920. The number of notices served was nil.

Table of Breaches of Special Sanitary Requirements for Bakehouses, Sections 97—100 Factory and Workshops Act, 1901.

Section of Act	Contravention	Found	Remedied
Sec. 97	Drain having opening within Bakehouse	...	..
98	Bakehouse unfit on Sanitary Grounds ...	...	...
99	Bakehouse requiring limewashing ...	125	102
	TOTAL	125	102

Outworkers.

The total number of lists received has been 171, as compared with 191 in the previous year.

	1920	1921
List of Outworkers received	191	171
Number of names on lists	263	275
Warning Notices sent <i>re</i> Lists	81	164
No. of visits paid to Outworkers during the year...	143	282

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises	Number of		
	Inspections	Written Notices	Prosecutions
Factories (including Factory Laundries) ...	159	67	...
Workshops (including Workshop Laundries)	1910	54	...
Workplaces (other than Outworkers' premises included in Part 3 of this Report) ...	18	...	...
TOTAL	2087	121	...

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars	Number of Defects		
	Found	Remedied	
<i>Nuisances under the Public Health Acts ;—</i>			
Want of Cleanliness	249	251	
Want of Ventilation	6	6	
Overcrowding	1	1	
Want of Drainage of Floors	...	...	
Other Nuisances... ..	28	30	
Sanitary accommodation	insufficient... ..	43	55
	unsuitable or defective	44	46
	not separate for sexes	13	13
<i>Offences under the Factory and Workshops Acts :</i>			
Breach of special sanitary requirements for Bakehouses (s.s. 97 to 100)	125	102	
Total	509	504	

3.—HOME WORK.

NATURE OF WORK	OUTWORKERS' LIST						Notices served on Occupiers as to keeping or sending list	Outwork in Unwholesome Premises (Section 108)	
	List received from Employers sending twice in the year			Sending once				In- stances	Notices served
	Lists	Con- tractors	Work- men	Lists	Con- tractors	Work- men			
Wearing Apparel— Making, &c. ...	338	169	268	9	9	12	82	...	...
Furniture and Up- holstry	...	...	...	...	...	...	...	...	...
Umbrellas	...	...	...	...	...	...	...	...	...
Basket Making ...	2	1	1	...	...	...	...	...	...
Stuffed Toys ...	2	1	6	...	...	...	...	...	...
Total ...	342	171	275	9	9	12	82	...	...

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year							Number
Dressmaking and Millinery	...	...	...	...	...	...	400
Bootmaking and Repairing	...	...	...	...	...	...	318
Blacksmiths and Wheelwrights	...	...	...	...	...	...	61
Tailoring	...	...	...	...	...	...	116
Baking	...	...	...	...	...	...	90
Cratemaking	...	...	...	...	...	...	35
Engraving	...	...	...	...	...	...	21
Joiners	...	...	...	...	...	...	54
Plumbers	...	...	...	...	...	...	51
Others	...	...	...	...	...	...	334
TOTAL NUMBER OF WORKSHOPS ON REGISTER							1480

5.—OTHER MATTERS.

Class	Number	
Matters notified to H.M. Inspector of Factories:—		
Failure to affix Abstract of the Factory and Workshops Act (s. 133, 1901)	10	
Action taken in matter referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Act (s. 5, 1901).	{ Notified by H.M. Inspector 73 Reports (of action taken) 78 sent to H.M. Inspector ...	
Other		54
Underground Bakehouses (s. 101):—		
In use at the end of the year	...	

Motor Disinfecting Van.

The total mileage recorded during the year was 7,839 miles with a consumption of $780\frac{1}{2}$ gallons of Benzol which is equal to 10.04 miles per gallon.

The average number of miles run per week (51 weeks) was 153.6 miles, with an average consumption of 15.3 gallons of Benzol.

The highest mileage in one week with Benzol was 244 miles—Benzol used $22\frac{1}{2}$ gallons.

Motor hire was necessary for 10 days owing to the motor being held up for repairs.

Housing.**NUMBER OF HOUSES.**

There are close upon 50,000 houses in the County Borough. Of this number probably about 95 per cent. are below a rental of £26 per annum. About 62 per cent. of the houses consist of four rooms or less. Fifty-four new houses were completed during the year.

POPULATION.

The population of the area is estimated to be 245,600.

APPENDICES.**Housing Conditions.**

Statistics Year ended 31st of December, 1921.

1.—GENERAL.

1. Estimated Population	...	...	...	...	245,600
2. General Death Rate	...	...	...	...	14.8
3. Death Rate from Tuberculosis	...	...	...	...	1.48
4. Infantile Mortality	...	...	...	...	134
5. Number of dwelling-houses of all classes	...	...	...	...	50,000
6. Number of working-class dwelling-houses	...	...	...	...	43,500
7. Number of new working-class houses erected...	...	...	...	...	54

2.—UNFIT DWELLING-HOUSES.**1. INSPECTION.**

1. Total number of houses inspected for housing defects (under Public Health or Housing Acts)	...	...	...	...	2,098
2. Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	...	...	...	...	Nil.
3. Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	...	...	...	...	Nil.
4. Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	...	...	...	...	1195

2. REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES:—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	...	...	...	...	Nil.
---	-----	-----	-----	-----	------

3. ACTION UNDER STATUTORY POWERS:—

A. Proceedings under section 28 of the Housing, Town Planning, &c., Act, 1919:—

1. Number of dwelling-houses in respect of which notices were served requiring repairs Nil.
2. Number of dwelling-houses which were rendered fit:—
 - (a) by Owners ... Nil.
 - (b) by Local Authority in default of owners ... Nil.
3. Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ... Nil.

B. Proceedings under Public Health Acts:—

1. Number of dwelling-houses in respect of which notices were served requiring defects to be remedied ... 1195
2. Number of dwelling-houses in which defects were remedied:—
 - (a) by Owners ... 1195
 - (b) By Local Authority in default of owners ... Nil.

During the year a systematic house to house inspection has been made in four of the following unhealthy areas:—

	No of houses Inspected
(a) Swan Bank Area, Burslem ...	60
(b) Broad Street Area, Hanley ...	132
(c) Sutherland Road Area, Longton ...	289
(d) Normacot Road Area, Longton ...	21

Thirty-six dwelling-houses have also been inspected and reported upon in various other parts of the Borough.

3323 defects were reported and dealt with under various Public Health Acts, the majority of which have been remedied.

The number of visits made in connection with the houses reported was 3,717. Visits for other causes numbered 578, and 90 appointments were kept.

During the year, No. 24, Bourne's Bank, Burslem, situated in the Swan Bank Area, has been demolished by the owner because of its dangerous structural condition.

Appended is a summary of the defects dealt with during 1921.

Summary of Sanitary Operations for 1921.

	Defects.
Defective plaster of walls and ceilings	768
Defective roofs	199
Want of, a defective spouting	174
Damp	344
Defective floors	332
Defective window frames, sash cords, etc....	134
Dilapidated woodwork, brickwork, etc. ...	604
Dilapidated wall-paper, dirty ceilings, etc. ...	45
Defective drainage	7
Insufficient drainage	23
Sinks and waste pipes required	28
Defective sinks and waste pipes	29
Structural defects	245
Defective W.C. fittings	99
Broken W.C. pedestals and pans... ..	15
Want of flushing apparatus to H.F. pans ...	18
Insufficient water supply to W.C.'s	8
Defective covered ashpits	16
Defective ashbins	39
Defective yard paving	75
Unpaved surfaces	37
Insufficient water supply for domestic purposes ...	28
Accumulations	33
Foul W.C. pedestals and pans, etc.	23
Total	3323

In addition to this a large amount of work has been carried out under the Public Health Acts by the Inspectors of Nuisances.

C. Proceedings under sections 17 and 18 of the Housing, Town Planning, &c., Act, 1909.

1. Number of representations made with a view to the making of Closing Orders Nil.
2. Number of dwelling houses in respect of which Closing Orders were made Nil.
3. Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit ... Nil.
4. Number of dwelling houses in respect of which Demolition Orders were made ... Nil.
5. Number of dwelling houses demolished in pursuance of Demolition Orders Nil.

Increase of Rent and Mortgage Interest (Restrictions) Act, 1920.

Sec. 2. sub-sec. 2.

During the year 36 applications for certificates under this Act had been received, and in 33 cases, a certificate was granted. A statutory notice has been served upon the owner in each case to remedy the defects found.

An application for a Report under the Rent Restrictions Act was made by an owner. The Report was granted.

REGISTER OF RAINFALL IN 1921. **KEPT AT THE MEIR, LONGTON.** (By the courtesy of Mr. R. C. Frain).

	Total Depth (inches)	Greatest Rainfall in 24 hours		No. of days on which '01 inch or more fell
		Inches	Date	
January	3'17	'57	17th	27
February	'29	'19	25th	10
March	1'57	'20	19th	24
April	1'39	'41	13th	14
May	1'47	'30	29th	19
June	'71	'30	26th	7
July	'94	'49	25th	12
August	4'31	1'20	28th	21
September... ..	1'25	'47	12th	9
October	2'37	1'36	3rd	13
November	2'09	'59	2nd	16
December	2'54	'43	27th	23
TOTALS	22'10	...	...	195

